

Center of Excellence
in Asia 2010
and the World 2020



*Universitas Terbuka:
A Journey towards a Leading Open and Distance
Education Institution 1984-2008*

Editor

*Aminudin Luhairi
Endang Nugraheni*

PENERBIT UNIVERSITAS TERBUKA

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Open and Distance Education
Institution 1984 – 2008**

**Editor :
Aminudin Zuhairi
Endang Nugraheni**

**PENERBIT UNIVERSITAS TERBUKA
2009**


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Dedication to Rector Universitas Terbuka

When ideals or expectations have been articulated, it must be adopted as the main goal and direction for an organization to move into the future. Without clearly stated goals, an organization will move through vague direction, without measurable indicators, clear destination to reach, nor target to achieve. UT has articulated these ideas since 1998, and systematic, comprehensive and integrated effort of their implementation has been accentuated since 2001.

The common ideals and expectations have crystallized as UT's vision, i.e. becoming a center of excellence in distance higher education in Asia by 2010 and in the world by 2020. Vision is a far away goal to reach with strong determination, common sense of *esprit de corps*, and continuous internalization among people within UT.

It is not an easy task to bring vision into reality for future development of UT. Strong leadership, constant commitment of all UT staff, and courage in taking responsibility are needed. With the principles of good and corporate governance and total quality managements as foundation, all UT staff shall be actively involved and encouraged to take greater roles in their contributions for the advancement of UT. Responsibility shall be shared by all, so that every single employee will make necessary effort to participate in every part of the wind of change. The impact would be extraordinary. The wave of change will keep

moving through, enforcing all staff to change themselves and achieve defined targets.

Nowadays in 2009, UT has significantly developed itself to be a well respected distance higher education institution. This has been an achievement following long and tedious effort and hard work. UT has been working hard for over twenty four years since its inception in 4 September 1984 to put plans into reality. Success that is booked now is an accumulation of a series of successes – the activities of which have been done since 1984. During the period of 1984-2000, UT spent its effort to lay the foundation for further development of the university. Meanwhile, the following period of 2001-2009 has witnessed the reform era of bureaucracy in which UT made significant steps of reinventing itself. Its distance education practices that have been implemented in the previous 16 years were reviewed and revised for improvement. Principles, norms and ethics in distance higher education institution were reviewed, clarified, and subsequently redefined. When redefinition is eventually made, it is merely for one purpose, that is, to achieve the vision of UT by 2010 and 2020.

Changes move on like an orchestra that needs a lot of talented players who play various kinds of musical instruments but they are based on the same musical scores. As an orchestra, a conductor, of course, is needed. He/she will perform his/her role as arranger or designer, steward and teacher. During the period of 2001-2009, Prof. Dr. M. Atwi Suparman, MSc has been performing his role as a conductor of an orchestra called UT. As a Rector, Prof. Dr. M. Atwi Suparman, MSc has inspired, initiated, as well as led the process of UT exploration to re-establish its identity as a well respected distance higher education institution and become the captain of the change process. As such, it is reasonable indeed that this invaluable book is specially dedicated to Prof. Dr. M. Atwi Suparman, MSc., as a manifestation of respect and appreciation on his visionary leadership of 8 years of being the captain of UT. So many lessons have been learned, so many precious experiences can be learned from him. Also,

there have been so many important ideas have been shared and they can be used as a source of inspiration for the development of UT – not to mention the ideals and expectations that motivate us to move ahead.

With the absence of strong leadership, process of change will not be on its right track and may be counter-productive. As a Rector, Prof. Dr. M. Atwi Suparman, MSc has taken his important roles as designer, steward, and teacher. Changes in UT system have been designed and planned systematically, continually and comprehensively. In order that the design of change can be implemented appropriately, Rector has been intensely working hand-in-hand with colleagues and staff to ensure that all necessary requirements to support the process of change can be fully met. His role as a teacher has been demonstrated in many opportunities by coaching, supervising and briefing those who are in charge at the implementation levels.

The process of change moves on continuously and consistently. As a result, UT has been awarded by ICDE (International Council for Open and Distance Education) in 2005 the Certificate of Quality and International Accreditation. This award is an international recognition for UT as shown in its high quality of its distance education practice that meets internationally acceptable standards. Recognition for UT successful achievements also comes from the ISO certification agencies. Until 2009, UT has been awarded 24 certificates of ISO 9001:2000 in distance learning services of its 24 Regional Offices, and further 6 certificates of ISO 9001:2000 in various areas of UT core business processes in Head Office. UT has an outstanding position among the international community of distance higher education institutions in Asia and in the world. The Rector of UT, Prof. Dr. M. Atwi Suparman, MSc is the President of AAOU (Asian Association of Open Universities) 2007 – 2011, while Vice Rector I, Prof. Tian Belawati, PhD is the Secretary General of AAOU for the same period. At the world level, the Rector of UT has been appointed as a member of the Board of Trustees of ICDE for two periods, i.e. 2007-2009 and 2009-2011.

Articles presented in this book attempt to describe UT experiences in managing change. All authors in the present book are distance education practitioners in the process. Therefore, it is an invaluable learning resource in which practitioners of change share their experiences in the process. The book is a translation of the Indonesian version entitled "*Perkembangan Universitas Terbuka: Perjalanan Mencari Jatidiri Menuju PTJJ Unggulan*" that has been published earlier. The translation of the book into English aims to show UT strong commitment to participate in the effort to build better and more prosperous world and make contributions to the development of knowledge and good practice in distance education. Last but not least, we hope that this book can be an important source of knowledge and inspiration for readers interested in distance education.

Jakarta, April 2009

Lembaga Penelitian dan
Pengabdian kepada Masyarakat
Ketua,



Agus Joko Purwanto

Foreword by the Rector of Universitas Terbuka

To celebrate the 24th Anniversary of the establishment of Universitas Terbuka (UT) on the 4th of September 2008, UT publishes this book entitled "Universitas Terbuka: A Journey towards a Leading Open and Distance Education Institution 1984 - 2008", specifically addressing the historical development of UT for the past 24 years. This third 8 years cycle or *triwindu* according to Javanese mythology symbolizes the belief that things will be working accordingly (*anama/jemawal*).

This book focuses on the development of UT in terms of activities within operational units. UT as an institution is seen from the points of views of operational systems and procedures, and how units within UT implementing those defined system and procedures. This book further focuses on addressing three areas of UT quality



improvement and development, namely academic quality, internal management, and student participation.

During its historical development, UT has attempted to improve the quality of educational process and services. This is UT commitment to develop and educate students to be able to survive in global competition. To achieve its vision and missions, UT has to implement four important initiatives.

First, UT has to implement educational reform based on the principles of quality, relevance, accessibility, and equality of opportunity. Quality improvement of educational process can be implemented in the areas of curriculum, learning materials, learning support services, examination materials, and examination administration. Improvement of educational relevance can be conducted through the opening of new study programs relevant to the community needs, implementation of community education programs, and implementation of open and flexible educational system to facilitate the achievement of life-long learning principles. Accessibility of services are developed to enable UT to be accessed by the community as part of the effort to implement equality of opportunity in education as mandated by the Republic of Indonesia Constitution of 1945.

Second, UT has to establish partnership with various national and international institutions in order to support its distance education system and operations. Through networking and partnership with various organizations, UT is expected to improve its quality and enhance its competitiveness.

Third, UT has to enhance the use of information and communication technology. This is aimed at improving accuracy and timeliness of services and educating the society to use information and communication technology to enhance global competitiveness of the human resources.

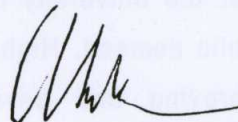
Fourth, UT has to enhance its quality assurance system as a stepwise, comprehensive and systematic approach to quality improvement. The UT quality assurance system comprises all aspects of distance education, namely policy and

planning, human resource development, management and administration, student services, program design and development, course design and development, learning support services, assessment of student learning, and media for learning.

As the result of quality assurance effort and continual improvement, UT was awarded the Quality Certification and International Accreditation by the International Council for Open and Distance Education (ICDE) Standards Agency (ISA) in 2005. Then, in 2006, UT was awarded its first ISO 9001:2000 for the implementation of quality management system in the area of the distribution of learning materials. In 2007, 12 certificates ISO 9001:2000 were awarded to UT, one in the area of development of learning materials and examination materials, and distance learning services of 11 Regional Offices. In 2008, an ISO 9001:2000 certificate was awarded in the area of academic administration services in UT Head Office, and 4 additional Regional Offices were also awarded ISO 9001:2000 certificates.

This book is expected to share some of the UT experiences in managing distance education system so that the public is well informed and has deeper understanding about fundamental principles of distance learning, its strengths and weaknesses. I wish to the authors for their seriousness of purpose in contributing to the publication of this book and to the editorial team. Both authors and editors have worked hard to construct and document their knowledge in the field of distance education has enabled this book to be easily understood by the public.

Rector of Universitas Terbuka,



M. Atwi Suparman

Preface

The book *Universitas Terbuka A Journey toward a Leading Open and Distance Education Institution 1984-2008* has been written by administrators and members of staff of Universitas Terbuka (UT) who have significant professional experience with UT. It comes to no surprise that the book has been written in great detail, and it has included detailed account of the development of the UT during the period since its establishment in 1984 until the present time and where it is going in the future. Readers are expected to have a better understanding of what UT or distance education is, how it operates, what its educational foundations are, and how it has developed and will continue to flourish in serving the citizens in the future. All of this information is presented in fourteen chapters which can be summarized as follows.

Chapter 1 presents historical facts on the events around the birth of UT. The founders of the UT were decision makers in the Directorate General of Higher Education, who were preoccupied with the effort to address the problems of low participation rate in higher education in the 1980s. The government set the target to increase the level of participation rate in higher education and empower the university to become the bridge between science and technology and public demand. Higher education is expected to function as a national tool for improving and developing the quality of life of Indonesian citizens. Conventional approaches to higher education was considered inadequate to meet the target, so investment in educational technology was preferred to allow for the

use of distance education system in higher education, in which some institutions have already had the experience.

Chapter 2 presents the development of academic field in UT, covering discussion about study program, curriculum, and courses. It can be said that these three aspects are the heart of educational program which influence the other aspects. Therefore, by paying close attention to these three aspects, readers will understand the development of other aspects of UT distance education practice.

Chapter 3 discusses the development of learning and supplementary materials. As a distance education institution which acknowledges the importance of media as the "vehicle" for transferring knowledge from teachers to learners, UT continues to develop various kinds of media which can function as reliable and proper vehicles. In reality, the effort is not straightforward due to constraints in the development process and media utilization of course materials. These constraints should not discourage UT in providing media services to students, as UT is aware of the fact that media is vital component in the delivery of distance education.

Chapter 4 illustrates the use of tutorial as learning support for distance learners. In distance education system, learning process involves self-study, in which students must have learning initiative to study on their own, or form a study group, or consult with tutors and supervisors. Although self-study is required, distance education institution is obliged to provide learning support services for the students. Learning support should be provided since there are various types of students' characteristics in terms of age, educational level, study habit, study skill, or readiness and ability to study on their own. Therefore, learning support services should be provided, even if only a small number of students actually utilize it. UT tutorial services are provided either face-to-face or at a distance by means of various media.

Chapter 5 describes presents the development of assessment system in UT, from the preparation of test materials, development of item banking system, administration of examination, and processing of examination results. Examination is the final stage of academic quality control, which involves both Head Office and Regional Offices.

Chapter 6 discusses development in the utilization of information and communication technology at UT. Since it was founded in 1984, *Universitas Terbuka* (UT) has developed its own computerized management system, and it has been continually improved to respond to technological development and to fit the specific needs of a distance education institution. UT has developed an integrated IT system, in which student information can be quickly retrieved, e.g., the student grade per semester, academic progress, and student projection and statistical data for decision makers' necessities. So far, UT has developed various other fields of computer-based applications, and these applications have been developed to meet the needs of electronic data processing, facilitate learning process and internal communication among staff in UT Head Office and Regional Offices.

Chapter 7 documents the development of UT library, from conventional to digital library. The presence of a library as a learning source in an educational institution is a must, and UT library has been established since as long as the establishment of UT as a distance education institution. At the beginning, the library was a part of Educational Media Production, Informatics, and Data Processing Center. In 1992, this Center was then developed into three separate Centers, namely Computer Center, Multi Media Production Center, and Library. With the recent change into UT new structure in 2005, the name of UT library was changed again to become Library Service Center (*Pusat Layanan Pustaka*). UT library focuses its collection on subject matter to develop UT learning materials and to enrich distance education literature.

Chapter 8 gives an account of developments in cooperation and partnership. From the beginning Universitas Terbuka (UT) has been designed as a unique institution of higher education. It is a non-conventional, distance higher education institution which does not have its own facilities as conventional or face-to-face institutions. Therefore, UT needs various types of external resources to facilitate its operations management. UT does not have the sufficient resources of its own to support its distance education system. For this reason, it is appropriate to consider UT as a higher education institution that manages resources available internally as well as externally. UT can operate well with the support from its partner institutions. Nowadays UT cooperation and partnership have become more complex in line with the development science, technology, and the changing needs of the society. Broadly speaking, there are three types of cooperation with UT relating to academic development, operational activities, and student recruitment.

Chapter 9 illustrates development of certification and accreditation. Since 2001, concrete effort and actions to improve the quality of UT services have been taken, including implementation quality assurance system. This was initiated with the establishment of the Quality Assurance System Committee in October 2001, with the mandate to study the draft of the "Quality Assurance Framework" developed by the Asian Association of Open Universities (AAOU). The team finally adopted the draft "AAOU Quality Assurance Framework" as reference for the UT Quality Assurance System (UT, 2002), which was subsequently disseminated and introduced to the management and staff during the National Coordination Meeting in April 2002. At the later stage, the UT Quality Assurance Framework was further elaborated in the forms of documented systems, procedures, and work instructions which are necessarily vital to the UT operations. External evaluation was conducted by inviting external evaluation agency, the National Agency for Higher Education Accreditation (BAN PT) and two international institutions namely "International Council for Open and Distance Education (ICDE)" and "International Organisation for Standardisation (ISO)".

Chapter 10 presents development of learning materials services. In any distance higher education system, including that applied at UT, learning materials are one of the major components in the teaching learning process. UT students have to learn independently from the self-instructional materials. The learning materials are to be received by the students according to the schedule. The timeliness of receiving the materials by the students will ascertain the success of the UT students in their studies. The timeline for the distance students to receive the learning materials must be carefully calculated to allow students to have enough time to study the learning so that the students will have better learning achievement. The main constraint in the distribution of the learning materials is the students' domicile location, which is separately located in all over Indonesia. The distribution of the learning materials must involve the use of different kinds of transportations, such as by land, sea, and air. Not all means of transportation can be relied on in sending the learning materials quickly to reach each of the students' addresses. UT has attempted to effort to seek and improve the learning materials distribution system and to try to implement the best and most efficient system in order to ensure that the students can get the learning materials on time and in accordance with the courses they take. The UT learning materials distribution system has gone through several changes and improvement in order to meet the changing requirements of UT operational system.

Chapter 11 talks about the development of student support services. Student Support Services at UT are available for students as well as for prospective students. At UT, support service is known as student support service. In general, it is aimed at (1) facilitating and helping students' learning process, (2) encouraging the students to be able to study independently, (3) responding to the students' questions and requests quickly and efficiently, and (4) solving the students' problems accurately and timely. The UT support service includes providing information and consultation, academic administration services, as well as academic services.

Chapter 12 discusses development of students and alumni. At the beginning, UT attracted many high-school graduates who could not be accepted in regular state higher education institutions. The number of UT students has fluctuated and grown during the first 22 years.

Chapter 13 gives an account in development of UT Regional Offices. In general, Regional Offices share similar characteristics, despite some differences according to its regional contexts.

Chapter 14 addresses future challenges of UT to be a centre of excellence of distance higher education institution in the world. It addresses effort to achieve the UT vision to become a center of excellence in distance higher education in the world in 2020. Discussion begins with the explanation about what it means, why, and how UT can be a world's centre of excellence in distance higher education. It then follows with discussion about external conditions, both globally and nationally, and internal conditions that should be prepared to pave the way for putting forth UT to become a world-class distance higher education institution. Current and future trends of distance higher education will be explored in order to provide the context, scope, rational considerations in the effort to achieve the UT vision to become one of the world's centers of excellence in distance higher education. Further discussion will focus on the prospects of global roles of distance higher education institutions, challenges faced, and actions to be taken. It is important to note that human resources play an important role in realizing the UT vision.

Editor,

A. Zuhairi

E. Nugraheni

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The Events Around the Birth of Universitas Terbuka

SETIJADI

The Birth of Universitas Terbuka

The Early Conceptor of Universitas Terbuka

The early conceptors of the birth of Universitas Terbuka (UT) were decision makers in Directorate General of Higher Education (DIKTI), i.e. Prof. Doddy Tisna Amidjaja and Prof S. Pramutadi. At that time, the Fourth Five-Year Development Plan (*Repelita IV*) was being prepared. One of the problems that emerged was that participation rate in higher education age group of 18-25 year old was still low, which was only about 7%. This means that those entering the state higher institutions were only about 400.000 students, while students of

private universities were approximately 300.000 students. The government targeted that by the end of *Repelita IV* the number of the students enrolling in both government and private universities could reach 1.5 million students. In addition, the university had to serve as the bridge between science and technology and public demand. Thus higher education functioned as a national instrument for improving and developing the quality of life of Indonesian people.

To increase student participation rate from 700.000 to 1.500.000 in five-year period, the government needed another type of approach, because with conventional approaches to higher education, the target was unlikely met. Another consideration was that investing in additional academic staffs and classrooms would be difficult, because it would take a lot of time. Finally, investment in the educational technology was preferred. Teaching and learning through distance education had been used in Australia and New Zealand for a long time. The universities that have especially developed using this approach have also proved to be successful in South Africa, Britain, Thailand, and Pakistan.

At that time, Indonesia was not a new comer in distance education. Education through correspondence had been carried out to improve the teacher quality, and education by the use of radio had also been used by Department of Agriculture for the farmer groups. Besides, Bogor Agriculture Institute (*Institut Pertanian Bogor / IPB*) along with Directorate General of Higher Education had conducted distance education program by means of satellites to improve the quality of the university lecturers in the eastern part of Indonesia. This DE program was well-known as Satellite Education System (*Sistem Pendidikan dengan Satelit/ Sisdiksat*), launched in June 1984. Teaching Certificate V Program also used DE approach. All of those experiences have been useful lessons in establishing distance higher education (DHE) that needed less teachers and classrooms.

Academic staffs needed for writing course materials and delivering tutorials could be provided by other universities without interrupting their main activities. The Regional Offices needed by this new university could also be borrowed from the local universities. To establish cooperation between the distance higher education institution that would be founded and the established universities in Indonesia, The Minister of Education, Prof. Nugroho Notosusanto, invited Rectors of state higher education institutions to attend to the presentation of the new university described by the Preparation Committee of the Development of Universitas Terbuka (UT). Additionally, he also addressed them to support the UT operations by means of providing lecturers who were needed to write modules and to deliver tutorials. He also appealed to open their libraries for UT students and to house UT Regional Offices. Except one, all Rectors agreed to help UT such as asked by the Minister.

Implementation of the Idea of Founding Universitas Terbuka

In February 1980, USAID agreed with a request of the government of Indonesia to help set up an educational technology center, which, then, called Communication Technology Center for Education and Culture (*Pusat TKPK*, then abbreviated as *Pustekkom*). *Pusat TKPK* until 1984 played an important role in giving support in the preparation of UT.

In January 1982, a series of workshops were conducted by *Pusat TKPK*, *Stanford University* and *the East-West Communications Institute* in 18 days, in Jakarta and Yogyakarta to discuss various forms and aspects of distance education.



The Minister of Education and Culture Prof. Nugroho Notosusanto, the British Ambassador, and The Chairman of Preparation Committee of UT Founding Prof. Setijadi looking at the computer display.

The result of the discussion was a short plan about distance learning University, which, at that time, was called Universitas Terbuka (Open University). Then, during two years, there was no significant activity to continue the plan of this open university, because the Minister of Education and Culture was still in doubt of whether it was the time for Indonesia having such a university. In October 1983, the new Minister, Prof Nugroho Notosusanto, decided to continue the program of the Open University by establishing a Preparation Committee.

With the assistance of the United States of America Information Department (USAID) in January 1984, a workshop was held to discuss UT plan further. This workshop was attended by participants from various universities in Indonesia, and some interested institutions. It was carried out in Indonesian Banking

Training Institute (*Lembaga Pelatihan Perbankan Indonesia/LPPI*) and also attended by some of participants from Bank of Indonesia and LPPI.

With the support of Educational Communication Development, The Preparation Committee of UT Foundation made a temporary operational plan based on the plan created in October 1981, and the result of discussion in the 1984 Workshop. This plan, *Initial Planning Considerations*, which was written by some consultants from various countries, finally, was only used as a white book by UT staffs, because UT staffs were busy with the very speedy passing events.

It could be said that UT was carried out without enough detail concrete plan. The course materials had to be immediately prepared, at least for one and a half semester. And at last, the course materials for three semesters were ready before the opening in September 1984. In order to prepare the writers and staffs to produce the ready-to-print manuscripts, they needed trainings. Finally, UT could recruit approximately 1000 writer candidates that were trained in three days consecutively. The staffs who prepared ready-to-print manuscripts were also trained in using simple desktop computers (Apple II), which was a new office innovation at that time and very unfamiliar tools for the new recruited staffs.

In September 1984, UT was ready to accept the first students. This could happen due to the help of Universitas Indonesia (UI) Computer Center that lent mini computer and its software for registration and students' data storage.

Concrete Form of Universitas Terbuka

The legal foundation of UT was the Decree of President No. 41 1984, while the regulation used was the higher education regulation of Indonesia, which was not written specifically for distance higher education. Therefore, the UT organization structure –which was not in the Decree of President– had to be synchronized with the organizational structure of conventional university.

When the Minister issued the Decree about UT structure, there were many difficulties in the implementation because the bureaucrat who arranged it did not have knowledge about UT needs. As a compromise, it was suggested that UT appointed technical task force units (*Unit Pelaksana Teknis/UPT*) as an adjustment to the formal organizational structure of UT. Finally, UT operated with organization structure similar to the conventional university added with some UPTs i.e. UPT Course Material Distribution, UPT Examination Center, UPT Media Production Center, and UPT Publishing Center.

Background to the Birth of Universitas Terbuka

Reason for the Birth of Universitas Terbuka

During the last decade of the 1970s, there were significant numbers of junior and senior high school teachers who got minimal training through crash programs to fill in the highly needed teachers, therefore it was considered that their basic skills for teaching needed improvement. Firstly, they were educated within the responsibility of Directorate General of Elementary and Secondary Education (*Ditjen Dikdasmen*). To accommodate these needs, Junior High School Teacher Education (*PGSMP*) and Senior High School Teacher Education (*PGSMA*) were set up. Then, after all post senior high school education had moved to the responsibility of DGHE, Teacher Education was also moved to DGHE. DGHE appointed some Teacher Training Institutes (*IKIP*) to offer Diploma Program I for SMP teachers and Diploma Program III for SMA teachers. Then the

teacher education was moved up to Diploma Program II for SMP teacher and Strata 1 for SMA teachers, after students had worked for three years in schools.

In fact, to send them out for further education was not easy, because there were no stand-in teachers in schools. In addition, the budget for the scholarships was very high. The new teachers graduated from IKIP were always sent to the rapidly developing new secondary schools due to the increasing number of pupils graduated from the *Inpres* Elementary Schools.

The only way to further their education was by DE method. In 1981, DE for Diploma II SMP teachers and Strata 1 for SMA teachers — that was directly managed by *DIKTI* and supported by some IKIPs — started to operate. The operation faced some constraints, because *DIKTI* was not an educational institution although it was helped by the bigger institutions of IKIPs.

The other constraint faced by government in the third period of Indonesian Five-year Development (*Repelita*) was that there were significant numbers of secondary high school graduates who had difficulties in entering the limited number of available universities. In the early *Repelita IV*, secondary high school graduates reached about 600.000 students. This number rapidly increased to 1,1 million students at the end of *Repelita IV*. While the established higher or tertiary education institutions were only able to accommodate about 400,000 students, it would be short of place for about 700.000 students, if all of the secondary high school graduates wanted to further their study at higher education institutions. One of the missions of the *Repelita IV* was to provide educational opportunities equally. It had been difficult if the government had only relied on the expansion of conventional higher education institutions, considering the geographical condition of Indonesia comprising more than 7000 populated islands.



At that time, DGHE also had a project called Teaching Certification V (Akta V) in which its task was to increase teaching competencies of tertiary education lecturers. This project was also difficult to manage because it was separated from higher education institution resources.

In order to solve the problems, the government decided to develop a university with open and distance education mode which was flexible enough to serve students around the

country including those living in the remote area. The education system of this university should be in distance education (DE). One of the advantages of DE was that it did not use many teachers and classrooms, since teaching and learning were delivered in the form of printed and non-printed media. The face-to-face interaction between students and their teachers was seldom conducted, and if needed it could be done by means of media such as by mail or telephones. The teachers who wrote course materials and delivered tutorials could be part-timely hired from the established local universities without disturbing the daily

operation of those universities. Thus, the education cost of DE University was relatively lower than that of conventional higher education institutions.

The Resources of the Government to Found Universitas Terbuka

The main problem faced by the government was that there were not enough human resources who had enough understanding and knowledge about DE. Study program that was close to DE was Education Technology study program, which was seldom offered by common universities. IKIP Jakarta (now UNJ) offered this field of study at undergraduate level. The Department of Education and Culture had a center called Pusat TKPK (part of Agency for Education and Culture Research / BP3K) that had the duty to open DE in secondary level of education.

The government, then, decided four person as the member of Preparation Committee of UT Foundation, which was led by Prof. Setijadi, the Vice Dean II Graduate Faculty of IKIP Jakarta, and three vices i.e. Prof. Sigit Muryono, from Teaching Certification V Project, Prof. Moegiadi and Prof. Sumadi Suryabrata both from BP3K. Further only Prof. Setijadi and Prof. Sigit Muryono who could totally dedicate their time to the development of UT. The two other persons were back to their previous units. The remaining persons recruited the main staffs, the operational staffs, and the administration staffs who helped the Committee in planning and developing the future UT further.

Additionally, *Ditjen DIKTI* had a piece of land that was actually planned for development of research institutions which was not happened due to certain reasons. The land and the budget for developing three buildings were altered into developing Center Office of the new institution. In 1985, UT that was located in one of IKIP Jakarta buildings was able to move to the new offices in Pondok Cabe, Tangerang.

During the preparation stage, the Committee had practically no budget. The budget used was budget from *DIKTI*. After UT was formally established and the new annual budget was started in April 1985, UT then had its own budget. Because of its budget limitation, UT could not afford some activities that should be paid like fee for module writers. However, the budget given by *DIKTI* had been used to buy equipment needed, i.e. some Apple II computers, which were the best desktop computer at that time for word-processing: from making draft of the manuscript to printed-master. Printing of course materials was outsourced in private printing houses. Student data processing used the computers of Center of Computer Science (*Pusilkom*) Universitas Indonesia.

At the beginning UT used fixed curriculum, so that every student in one study program took the same courses, and every students got their course materials after paying the tuition fee, therefore the distribution of course material was relatively simple. Every student would get the course material in a package distributed by mail. Students were registered, paid education fee, and got their learning package at the same Post Office. All of this process could be finished in the same day, so that students could also begin their learning on that day.

Student is doing Registration



After the fixed package of courses could no longer be employed anymore in the following semester since students might take different courses, the registration, education fee payment, and course material distribution became very complex for UT. At that time, UT was still lacking of experiences which thus generated various constraints in the field of student services.

The Opinion of Decision Maker about Universitas Terbuka

When UT was officially announced in State Palace by President Soeharto on the 4th of September 1984, State Television Network (TVRI) broadcasted inaugural lecture of Prof. Sumitro Djojohadikusumo. At that time, the program could be seen by all attendants of this ceremony.

Maybe an image was built that UT would use TV broadcasting as the main means of delivering the courses.

When Indonesia launched the first satellite Palapa, one of the reasons of the government was that the satellite could be used in education and telecommunication as well. At the time, Hughes Aircraft, which sold the satellite, came to the Minister of Education to make a kind of education experiments by means of the satellite. Maybe, because of the high cost, that experiment never happened except in the planning stage.



*Signing the promotion document
of the first Rector of UT*

In the mind of the politicians, decision makers, President and the Minister of Education and Culture, UT was expected to use satellite Palapa (Television and Radio) for delivering the courses. After seeing the United Kingdom Open University (UKOU) in Milton Keynes, Great Britain, operated, the Minister thought that Indonesia was not able to carry out DE like in UKOU, because they used sophisticated and expensive technology especially television technology which was used in UKOU supported by British Broadcasting Corporation (BBC). He had another determination that UT had to be immediately opened, because if not, there were too many students within the college age group that would be unemployed and not be accommodated in the universities. He also realized that in the developing country like Indonesia, it was not television that became the main medium to deliver the courses, but printed course materials, thus television was only used as supporting media.

The Preparation for the Birth of Universitas Terbuka

Preparation Made by the Government to Open Universitas Terbuka

Idea about the opening of UT had existed since 1981. The government through the *Ditjen DIKTI*, decided that UT was to be opened in 1983, to give opportunities in offering tertiary education which were highly in need.

A group of university lecturers together with the staff of *Ditjen DIKTI* had been given tasks to develop proposals about UT development plan. The first proposal was submitted in October, 1981 by the group led by Prof. Setijadi. This plan was basically a design which was made by the team of Directorate of Academic Facilities in June, 1982. This plan was submitted to the Minister of Education to be approved.

Meanwhile *Ditjen DIKTI* approached USAID to conduct workshop-seminar to discuss DE at the level of elementary to tertiary education. Thus workshop was conducted in January, 1982 in Jakarta and Yogyakarta for the first time. It was discussed the opening of DE university (UT) that was wanted by the government of Indonesia. The meeting had changed the previous October 1981 proposal a little bit.

After the Minister of Education decided the development of a Committee to prepare the opening of UT, *Ditjen DIKTI* together with USAID conducted another workshop which discussed about UT specifically. This seminar produces the concrete operational plan of some components of UT. This was followed up by the Academy for Educational Development (AED) sponsored by USAID by developing actual operation plan for UT. Unfortunately this plan was not completed and not acknowledged by UT staffs. At that time, UT staffs were very busy with the preparation for the birth of UT. With the limited staffs and very high

workload, there was no available staff to follow up the operation plan developed by AED. This operation plan was written by Dr. Bahman Vahidi, the former Rector of Open University of Iran, helped by Dr. Donald Ely of Syracuse University. This uncompleted plan was finished in February, 1984 and placed in the UT Library. Meanwhile the situation was quickly developed, offices were built and the first batch of students who registered at UT had reached 50,000 students.

Amount of Time in preparing the Opening of Universitas Terbuka

After Prof. Nugroho Notosusanto became the Minister of Education in November 1983, a decree of the Preparation Committee of the opening of Universitas Terbuka was founded. Due to the limited time of preparation, the first opening of UT was not in similar period with other universities, which were in June. The opening of UT was extended to September 1984.



Computer training to improve the quality of human resources

In the meantime, that limited time was also used to gain support from other universities and institutions needed in the operation of UT. By the request of the Minister to all State University Rectors, supports were gained from almost all of the state universities to open Regional Offices in every province. There was cooperation with the Computer Center of Universitas Indonesia in digital recording of students registration and examination, training in the use of super mini computer and the use of the computers, since UT could not afford to buy its own computer for data processing and storage. There was also cooperation with *PT Pos dan Giro*, the Post Office, for students to register and pay tuition fees, as well as for course material distribution. Later on there was also agreement with *Bank Rakyat Indonesia* for students to pay tuition fee. With TVRI, an agreement was also made to broadcast UT courses for 20 minutes every week. With RRI a similar agreement was also made, but with more broadcast time.

After all efforts in building support by means of cooperation were achieved, concentration was aimed at the writing and publishing of learning materials at least for the duration of two semesters. At that time, there were a lot of famous experts from conventional universities who were able to write UT learning materials (which further on called modules). Those writers were trained as DE course writers in several batches by Dr. Atwi Suparman and several senior staffs of UT. This writing process took a lot of time and energy of the staffs. After the writing was finished, manuscript was typed, quickly reviewed, and edited, so that it was ready to be published. At that time it was very common that staffs were working overtime till late at night to be able to meet the deadline.

Development of Academic Field

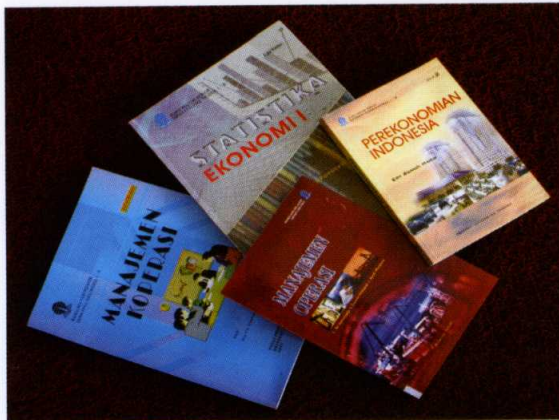
IG.A.K. WARDANI and PRAYEKTI

Introduction

The developments of three important academic aspects that will be discussed are: study program, curriculum, and courses. It can be said that these three aspects are the heart of educational program which influences the other aspects. Therefore, by paying close attention to these three aspects, readers will understand the development of other academic aspects.

The Development of Study Programs

Since its establishment in 1984, as mentioned in the Presidential Decree no.4/1984, Universitas Terbuka (UT) has four faculties: Faculty of Economics (FEKON), Faculty of Mathematics and Natural Sciences (FMIPA), Faculty of Teacher Training (FKIP), and Faculty of Political and Social Sciences (FISIP).



Study programs run by each Faculty varies in terms of numbers and levels. In general, development of study program is done based on social needs which can be identified through need assessment and survey. In relation to this, the priority of opening a study program is in accordance with the market segment. Study program that tends to have relatively small number of students and have small potential for future development will be incorporated into other relevant study program.

As distance education institution, UT has unique characteristics which is shown in its missions. One of its missions is expanding learning opportunity in higher education, so that from time to time UT gets assignments from the government related to improving learning quality. The examples of study programs which are closely related to this social needs are (1) DI and DII programs of junior high teacher training, (2)

the teaching certificate program, (3) DII in-service elementary teacher training program, (4) accredited certificate program for junior high and high school teachers, (5) certificate program for teachers who teach similar subjects.

In its early establishment, 1984-1985, UT had opened four undergraduate (S1) study programs which were: Economics and Development Study, Public Administration, Business Administration, and Applied Statistics (*Depdikbud*, 1985). Those who were interested in the programs reach the figure of 260.000. But because of various limitations, UT only accepted 54.035 students. In addition, in the second year of its opening, (1985-1986) UT opened undergraduate Education Programs which were: Physics Education, Chemistry Education, Biology Education, English Education and Diploma (DII) Education programs such as Mathematics Education, Natural Science Education, English Education, Social Science Education and Pancasila Education (Five Basic Principles of the Republic of Indonesia). These diploma programs were further added by 11 Diploma II programs which were managed together with Diploma Program for Junior Secondary School teachers from Directorate General of Primary and Secondary Education. Beside that, Teaching Certificate- VA for lecturers with non-education degrees and Teaching Certificate-VB for lecturers with education degrees were opened.

At the beginning, study programs managed by UT were Diploma and undergraduate (*Sarjana*) programs. However, in its development, UT also offers non-degree certificate programs and graduate programs. More detail development can be read in the section of the development of study programs in each faculty in the attachment.

Faculty of Economics (FEKON)

Since its establishment, Faculty of Economics has two departments: (1) Economic and Development Study which runs undergraduate Economics and

Development Study program and (2) Management, which runs undergraduate Management program. In 1993 Diploma-DII programs of Supervisory for Industry and Service, and Applied Computer in Finance were opened. The first program was closed in 1995 and the second was closed in 2005-2006. From time to time, the number and variety of the study programs at this faculty are relatively stable. One big development at this faculty was marked by the opening of graduate (master) program in Management which was started as Advanced Courses Program in 2003 and soon followed by the opening of undergraduate S1 program in Accounting. The development of the study programs at this Faculty is stated in Tabel1 of the Attachment.

Faculty of Mathematics and Natural Sciences (FMIPA)

FMIPA has three departments which were: (1) undergraduate-S1 Mathematics, (2) undergraduate-S1 Applied Statistics, (3) Biology with 4 study programs which were:

- (a) Diploma-DIII Agriculture extension specialized in Agriculture skills
- (b) Diploma-DIII Agriculture extension specialized in Husbandry skills
- (c) Diploma-DIII Agriculture extension specialized in Fishery skills
- (d) Diploma-DI Environmental Management.



The development of study programs at this faculty had been stable up to the year 2000. However, it has started to increase since 2003. In 2005, there was the opening of master degree program in Fishery Management, undergraduate (S1) program of Food Technology, and undergraduate (S1) program of

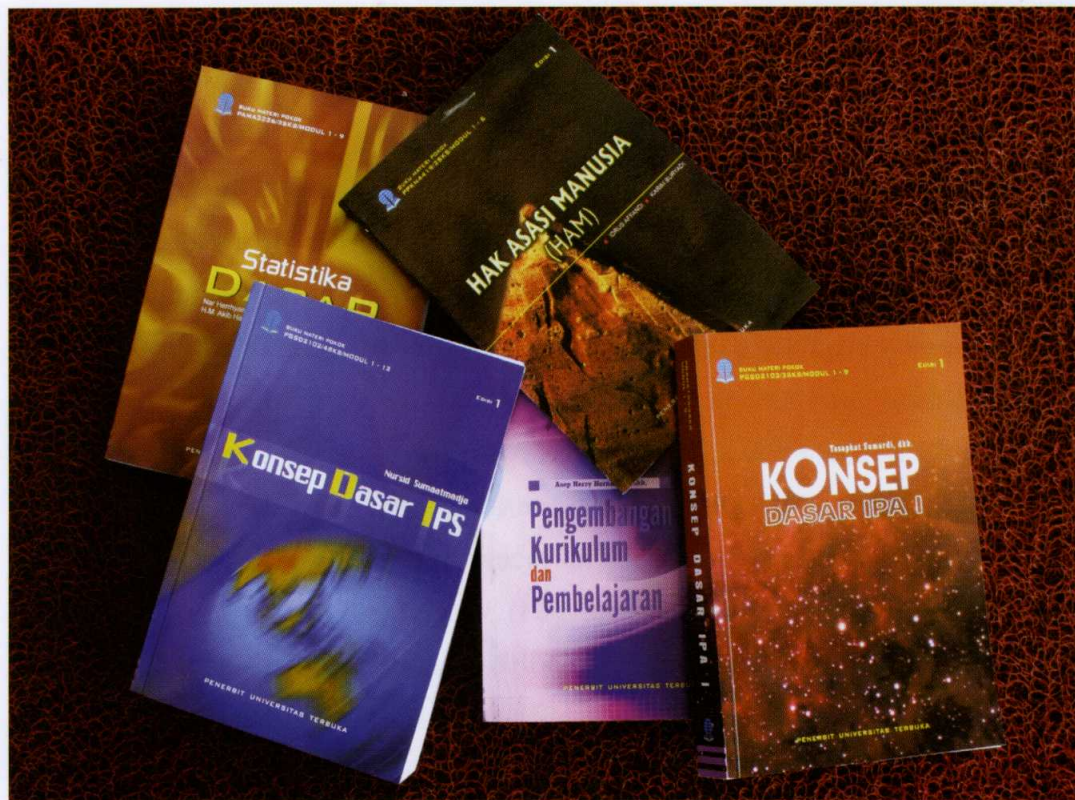
Agriculture Extension and Communication. Meanwhile, the faculty also closed some study programs, such as diploma (DIII) of Agriculture Extension which began to phase out in the 2005.2 registration period and this program will be entirely closed in the 2008.1 registration period. From the 2006.1 registration period certificate program of Post-harvest Management was closed, though the students were given opportunity to finish their studies until the 2006.2 registration period or to transfer their credit earning to the Food Technology undergraduate program. As a whole, the development of study programs at this faculty can be seen in the attachment (Table 2).



The Opening of S2 Fishery Management Program ini Muara Baru

Faculty of Teacher Training (FKIP)

The fast development of study programs occurs in this faculty because of its responsibility to provide in-service teacher training. Started with four undergraduate (S1) education programs and some diploma (DIII) education programs, this faculty is assigned to develop teaching certificate programs, such as teaching certificate program for lecturers, then for teachers. The additional courses which lead to certificate accomplishment are incorporated into the level of education. For example, if a student graduates from undergraduate (S1) Education, she/he will get Teaching Certificate IV, if a student graduates from diploma (DIII) Education, she/he will get Teaching Certificate III, etc.



Learning materials of FKIP

The significant development that becomes a milestone in the history of this faculty occurred in 1990 when UT was appointed to run the Diploma (DII) Program for Elementary Classroom Teachers in accordance to the Minister of Education's decree no.0854/4/1989 which necessitates all elementary school teachers in Indonesia to obtain at least a diploma (DII). A year later, Diploma (DII) Program for Elementary School Sports Teachers was opened. Because of the various needs to improve the quality of teachers, the faculty also assign to open specially designed or tailor made program which fits the available demand, for example the Certificate Program for *SMP Kecil* and *SMP Terbuka*¹ that consists of seven programs developed in 1995 to 1997. There was also Certificate Program for Subject Matter Teachers developed in 1994-1998.

With the improvement of teacher's qualifications at all levels, some of the certificate and diploma programs are closed gradually without impairing student's progress, and some undergraduate (S1) programs are offered for further qualification improvements. One major concerned that relates to this was when UT was permitted to open an undergraduate (S1) program for elementary school teachers as pilot project in 2002. This is also a significant accomplishment since there were only six state educational institutions for educators that had permitted to open similar program. In 2003, two undergraduate (S1) education programs that were S1 Education Economy and S1 Vocational programs was opened based on legal consent from the Directorate General of Higher Education.

By opening and closing programs incessantly according to needs, in 2006 this faculty ran nine undergraduate (S1) education programs, one teaching certificate program, and three diploma (DIII) education programs. Unfortunately, until 2006, the faculty had not been able to open a graduate program, although

¹ SMP Kecil literally means junior high school with limited number of students approximately 30-40 students, SMP Terbuka is junior high school for grown-up people who gave graduated from elementary school

some preparation such as need assessment had been done. However, in the second registration period of 2004 the faculty opened 2 special diploma (DII) programs for kindergarten teachers. This program intended to provide the teachers with broader mind, attitude and skills in developing the kindergarten children's ability. Before opening this program, accredited certificate program for kindergarten teachers has been opened which was a special order from some foundations and local governments. It noted that in 2006, the S1 program for Elementary School Teachers plays an important role in a national program for decreasing illiteracy by incorporating the program into the curriculum. Students who are also teachers required to teach literacy to some unfortunate member of the society, while an intensive guidance were provided. The development of study programs at this faculty can be seen in Table 3 of the Attachment.

Faculty of Social and Political Sciences (FISIP)

Since 1984 until 1991 study programs at this faculty consists of undergraduate (S1) programs of Public Administration, Business Administration,



Learning materials of FKIP

and Development Administration. Meanwhile, until 1990, FISIP had just one diploma (DIII) program in Taxation and two certificate programs which are Entrepreneurship and English Language. In 1993 the certificate programs were closed

and the Department of Communication which has diploma (DII) Library Program was established.

In 1995 there was fast development which was marked by the opening of Department of Language and Literature. Therefore, FISIP has three departments: Department of Administration, Department of Communication, and Department of Language and Literature. The Department of Administration consists of undergraduate (S1) programs of Public Administration program, Business Administration, Development Administration, and diploma (DIII) programs of Taxation, and Office Administration. The Department of Communication consists of diploma (DIII) program of Communication for the Extension Workers, and diploma (DII) program of Library. The Department of Language and Literature consists of undergraduate (S1), diploma (DIII), and certificate programs of English.

In 1999 FISIP developed further its structure and reorganized its departments and programs. As a result FISIP reopened three departments: (1) Department of Administration, (2) Department of Communication which consists of undergraduate (S1) Communication program, and diploma (DIII) Communication Extension program, and (3) Department of Sociology which has undergraduate (S1) Sociology of Economy and Social Issues program. This lasted until the year 2000.

From 2001 until 2006 FISIP consists of four departments as followed.

1. Department of Administration which consists of four study programs:

- S1 Public administration
- S1 Business Administration
- S1 Government Study
- DIII Taxation

2. Department of Communication which consists of two study programs:
 - S1 Communication study
 - DIII Library
3. Department of Sociology which consists of one study program:
 - S1 Sociology of Economy and Social Issues
4. Department of Language and Literature which consists of one study program:
 - DIII Translation

In 2003, there was a significant development at FISIP marked by the opening of Advanced Courses Program (ACP) in Public Administration, which was the embryo of Master degree program of Public Administration which was officially granted by the Directorate General of Higher Education in 2004. In detail, the development of study programs at FISIP can be seen in Table 4 in the Attachment.

From the above descriptions and tables, we can conclude that the developments of study programs were not similar for each faculty. In certain period, there was several study programs opened and closed. In 2002 to 2004 there were 13 study programs from three faculties which were closed: 5 in FISIP, 7 in FKIP and 1 in FEKON. Those mark the major changes of programs at UT (Universitas Terbuka, 2005).

The Development of Curriculum

Curriculum can be defined in various ways, such as a list of courses offered in a study program, a set of teaching materials, or a set of learning experiences which will be received by students. According to UU RI No. 20/2003 about National Education System, curriculum is defined as 'a set of plans and rules about goals, contents, learning materials, and delivery methods which used as

guidelines for learning activities in order to achieve certain educational goals (article 1, item no.19). This is the definition used in the article.

For an education institution, curriculum is a main source for determining goals and directions of a study program. Apart from various definition of curriculum, each educational program will always begin with curriculum development because it is curriculum that will guide how to run the program. No matter how simple the curriculum is, it would be properly documented by a well managed study program.

Considering the role of curriculum in educational program, it is understandable that curriculum will always develop in alignment with the development in society. Ideally, every five year curriculum should be reassessed. When there is basic change in the social needs which has not been accommodated in the curriculum, the curriculum should be revised and updated. In relation to that, UT, which has been operated in about 22 years, had revised its curriculum several times. The following explains the characteristics of the curriculum in each period.

1984-1990 period

This period can be said as the early period as UT was just established on September 4th, 1984. With short preparations before the official opening of UT, it can be imagined that the curriculum was not well designed. Due to the unavailable complete documents, some aspects related to the curriculum can only be traced back from the catalogue and student's guide book. The curriculum consisted of course content for each study lined up as credit units per semester. Undergraduate (S1) programs consist of 144-160 credit units. Diploma (DIII) programs consist of 110-120 credit units, Diploma (DII) programs consist of 80-90 credit units, Diploma (DI) consist of 40-60 credit units, and Teaching

Certificate program (so-called *Akta V*) consists of 20 credit units in addition to the 160 credit units of S1 program.

Beside content, other document showed about the prerequisite for choosing either major program or regular program for undergraduate students as well as the advantages for students chosen major program. Other available important document stated the syllabi that consisted of package of courses, completed with list of courses and their code, credit unit and exam hour per semester for each study program. This information gave an idea about curriculum structure.

Course grouping done at that time was in line with the national regulation, which supposed to last until 2001, consisting of:

- General Basic Courses (MKDU)
- Basic Skill Courses (MKDK)
- Applied Skill Courses (MKK)
- Courses for Teaching and Learning Process (MKPBM), especially for the Faculty of Teacher Training
- Optional Courses.
- Written Comprehension Exam (UKT)

1990-1995 period

The year 1990 was a historical moment for UT because at that moment the diploma DII program for elementary school teachers was opened which later becomes a program with the largest number of students. The curriculum was supposed to be developed as in-service program as enrichment from pre-service program for elementary teachers. Because both programs were developed at the same time so that curriculum could be developed iteratively. One of the important characteristics for the in-service program was that teaching experiences were considered as credit earnings. Teaching experiences acknowledged were

clustered in to 4-8 years, 9-12 years, and more than 12 years. Therefore study load was decreased in accordance with number of years of teaching experiences.

The curriculum in this period did not change much except that there were more elective courses. Study load for each program also varied greatly which ranged from 144 to 160 credit units. In this period, curriculum approach at the national level was about introducing the concept of core curriculum. It began with the development of basic abilities followed by addition of essential topics which supported those abilities. For this reason, the curriculum consisted of the core and the locally added curriculum. However, that national approach had not yet influenced UT curriculum.

1995-2000 period

In this period the essential change of curriculum was done such as increasing the passing grade for the diploma program from the GPA of 1.75 to 2.00. This decision was made in line with the Directorate of Higher Education Decree. The other important change was the application of the core curriculum approach. There was also curriculum revision for the diploma DII Teacher Training Program which had the largest number of students. This final revision version was called 1996 curriculum. At the same time, the pre-service teacher training program also revised their curriculum from the 1990 version to the 1995 version.

In the first registration period of 2000, UT established a new curriculum for regular programs which is called version 2000 curriculum. For the batch of students who registered in 1999 and before, there were major changes for they should follow the new curriculum. In order to help their credit earnings, the courses they passed before the year of 2000 could be transferred and accredited into the new curriculum. Whenever there were no equivalent courses, the credit

they already got were appraised as elective courses. Courses were divided into core and non-core courses in order to facilitate course transfer easily.

Other important occurrence in this period was the introduction of classroom action research in some study programs in FKIP. This was meant to encourage the students who happened to be teachers to improve their performances through the research they could do in their own classrooms. This course was analogous with the course of research methods which was generally offered to the graduate students.

2000- 2006 period

In the first registration period of 2002 (02.1) UT rationalized its curriculum for the regular program and which was called curriculum version 2002. It came to mind that in only two years time there were significant changes of curriculum. The streamlined curriculum was requiring minimum number of accepted credit units for each type of program. For example compulsory study load for undergraduate program was reduced into 144 credits unit. This was the minimum study load required according to the regulation. (There was undergraduate program that consists of compulsory 160 credit units at that time). In addition, the study load for diploma DIII program became 110 credit units and Diploma D II program was 80 credit units. Consequently there were no more elective courses. This decision was made to avoid the multiplicity demands of learning materials. In distance education system, the curriculum will significantly influence the diversity of learning materials which should be provided.

The other important change was the application of competencies approach to the curriculum development which was known as competency-based curriculum. As one of the state tertiary educational institutions, UT also implemented that approach. Various meetings and seminars among departments and faculties were held to familiarize the concept of competency-based

curriculum and then UT began to revise each curriculum accordingly. Major revision was finally accomplished in 2003. Factually, one of the changes was in the clustering of courses. Accordingly, the clustering of courses was based on four pillars of UNESCO as stated in the Minister of National Educational Decree no.232/2000 as follows.

- Courses in Personality Development (MPK)
- Courses in Knowledge and Skill (MKK)
- Courses in Working Skills (MKB)
- Courses in Work Attitude (MPB)
- Courses in Social life (MBB).
- Written Comprehensive Exam (UKT)

This clustering was really not considered appropriate because in principle all courses should contribute to the development of personality and ability to live together socially. However, this clustering was still used until 2006. Apart from it, FKIP had changed their clustering system. In 2004 there was another major change in the curriculum in which the comprehensive final exams (UKT) was changed into final project (TAP). This basic change required students to do the project under supervision as well as to sit final exam, so that they should be able to analyze and develop various alternative solutions in various problem solving cases in each field. Then in 2006, FKIP applied the competency-based curriculum by clustering courses that fit each supporting competencies which were as follows.

- Courses in Personality and Professionalism (MKPP)
- Courses of Basic Knowledge (MKBI)
- Courses in Education and Teacher Training (MKK)
- Final Project (TAP)

In 2004-2005 curriculum reanalysis was done for all study programs. In line with this process, documents concerning the curriculum in each study program

became well organized with the addition of general guidelines for learning and evaluation for each course, as well as course description associated with competency-based curriculum. As the follow up of the curriculum reanalysis, each study program had rewritten its academic documents in line with the competency-based curriculum approach.

In conclusion, the following shows the distribution of credit units for each course cluster, for either characteristically course-based clustering or status-based clustering. This load varies from one study program to the other. The distribution of credit units loads in the curriculums for each Faculty are shown in the Table in attachment 5 to 13 in the Attachment.

From Table 6 in the Attachment it can be seen that the distribution of credit unit load for course cluster in the teacher training program has constant proportion. MKDU has the smallest proportion followed by MKDK, and the biggest proportion is MKK. Meanwhile, for regular program, the distribution is different because the course clusters increase. Nevertheless, MKK is still the biggest proportion. Alongside with the distribution of credit unit load based on course clustering, there were also distribution of courses based on course status for non-education program as shown in the Table 1 and 3 in the attachments. This took place until the year of 2001 because in 2002 the clustering of courses was different, as well as the weight load.

In 2002, there were changes in clustering of courses as already mentioned above. With the changes in the distribution of credit unit load also changed. Table 8 to 10 in the Attachment shows the distribution of credit unit load for undergraduate program and diploma program in each faculty. This condition carried on until 2006, except for FKIP which revised again its course clustering according to competency-based curriculum.

The clustering of courses based on UNESCO's four pillars that are divided into MPK, MKK, MKB, MPB, and MBB was considered inappropriate. Therefore,

FKIP tried to make new clustering based on the contribution of courses to the core competence achievement. This effort created new clustering prevailed in 2006 with the distribution of new credit unit as shown in the Table 11 in the Attachment. Beside the distribution of credit unit load, there are the distribution of credit unit loads that combine course cluster and course status.

From the above explanation and tables, it can be concluded that the curriculum of UT was developed along with the changes of regulation as well as changes of stakeholders needs. The curriculum for each study program at UT has been well documented so that it is hoped that it will serve as the main guidelines for managing a study program.

Course Development

Courses are often considered as the 'flesh content' of a study program. In a study program, students basically only concerned with courses. Questions often arise related to courses were: how many courses they have to take, what ability is developed by each course, how much are credit unit loads for each course, and how they will be measured in each course. From the above questions it can be said that courses are very important in a study program. Because there is different intended achievement for each study program, so that there are different courses as well.

From the above explanation, it can be said that each study program will be supported by some courses. The number of courses in each study program depends on some factors such as levels of program, goals of the programs, and the credit units for each course. The number of courses in diploma study program is different from those of undergraduate programs. As a whole, the number of courses offered by a university is closely related to the number of study

programs offered. The more the study programs, the more will be the number of courses.

At the beginning of its establishment, UT offered four undergraduate study programs of three faculties. For undergraduate program with credit unit loads of 144-160 credits, the number of courses was between 50 to 60. If it was assumed that credit unit load of one course was from 2-4 credits, mathematically, the number of courses for four undergraduate programs was around 200-240. However, in fact, certain courses especially the MKDU cluster were similar to almost all study programs so that the university only provided a set of MKDU cluster courses for all study programs. Those conditions also applied for some basic skill courses (MKDK) cluster. Also, courses from different levels but in the same academic discipline would overlap. For example, some of the courses in undergraduate program for elementary school teachers were also taken by students of diploma DII program for elementary school teachers. This would reduce the number of courses. In addition, there were efforts to rationalize the number of courses in order to increase efficiency and effectiveness in term of cost. The UT has also encouraged the use of more and more courses by more than one study programs. These efforts have been made since 2001, and in 2004 as a result, eight courses were developed together and used by various study programs either in the same or different faculties (Universitas Terbuka, 2005 b). The development of courses in study programs from every faculty from 1991 to 2006 is shown in Table 12 to Table 15.

From the above explanation and tables as shown, it can be concluded that the variety and number of courses of each study program always expand. This condition has been caused by some factors, such as policies at the national level, university and faculty levels, market demand, and also because of the natural progress of the knowledge itself. This fact indicates that in the future, courses will keep changing and expanding in terms of variety and number. This

corresponds with the concept of continuous improvements that have to be done by educational institution.

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Development of Learning and Supplementary Materials

DEWI PADMO, DEWI MUTIARA, AND SRI KURNIATI

Introduction

As a distance education institution which acknowledges the importance of media as the *vehicle* for transferring knowledge from teachers to learners, Universitas Terbuka (UT) continues to develop various kinds of media which can function as reliable and proper vehicles. In reality, the effort is not straightforward due to some constraints in the development process and media utilization of course materials. However, the constraints should not cause UT to be discouraged in giving the best for its students and the community. This is because UT is aware that media is very vital component in the delivery of distance education.

During the preparation of UT establishment in 1983/1984, the Preparation Committee was only having about 10 months time before the launching of UT study programs. Among many things that the committee had to prepare were course materials to be used. By taking into account the distribution of students, accessibility, flexibility, and some economic considerations, as well as limited time for preparation, printed course materials were considered the most appropriate materials to be developed. Other media to support the printed course materials were developed in the following years.

Printed Materials

Most distance education institutions in many countries use printed course materials as the main media of delivering learning to its students. Even in institutions claimed mainly use non-printed media, the percentage of printed media used is still high. UT is categorized as a printed-based distance teaching university, as it mainly uses printed course material in its delivery. The decision to use printed media at distance education institutions is generally based on cost, accessibility, and flexibility. This consideration does not only apply to developing countries, but also to developed countries as well. In the course of 22 years, there has been improvement in the development of UT printed course materials, called Module or Main Textbook (*Buku Materi Pokok-BMP*), in terms of format, content, and cover.

Development of Printed Course Materials

Since the beginning, UT has been used writer-editor team approach in developing course materials. This approach involves two professions which are writer and editor. Writer is the one who has expertise in content or subject matter, and editor has skills in wrapping up the content in a certain format which

made them deliverable. To enhance the process of course material development, UT has been helped by experts and lecturers from various state universities, such as *Universitas Indonesia (UI)*, *Universitas Gajah Mada (UGM)*, *Institut Pertanian Bogor (IPB)*, *Institut Teknologi Bandung (ITB)*, *Universitas Airlangga (UNAIR)*, *Universitas Padjajaran (UNPAD)*, *Universitas Hasanudin (UNHAS)*, *Universitas Diponegoro (UNDIP)*, *Universitas Negeri Jakarta (UNJ)*, *Universitas Pendidikan Indonesia (UPI)*, etc. Editors are UT academic staffs assigned to put the materials together in certain formats and prepare them for printing and publishing.

NO.	FACULTY	TOTAL
1.	FKIP	639
2.	FMIPA	207
3.	FISIP	337
4.	FEKON	107
	Total	1288

Source: PPBAC, 2004

By using content experts from well-known universities in Indonesia as course writers, UT course materials are ensured of its high academic quality. Almost 97% of UT course materials are written by experts from other universities. The following table shows the distribution of

course writers in the four faculties at UT. The Modules eventually, are not only used by UT students, but also by students from other universities, both state and private universities, especially in the eastern part of Indonesia. This fact has been a pride for UT.

The developments of printed course materials by using Writer-Editor approach still carry on. But there were times when UT tried to use other approaches in developing course materials. In 1999, with the financial help from DIKTI, UT developed course materials by using Course Development Team approach, involving a number of experts in materials design, media, and instructional design. This approach was difficult to be implemented, as the more personnel involved, the harder it was to coordinate them. But this full team

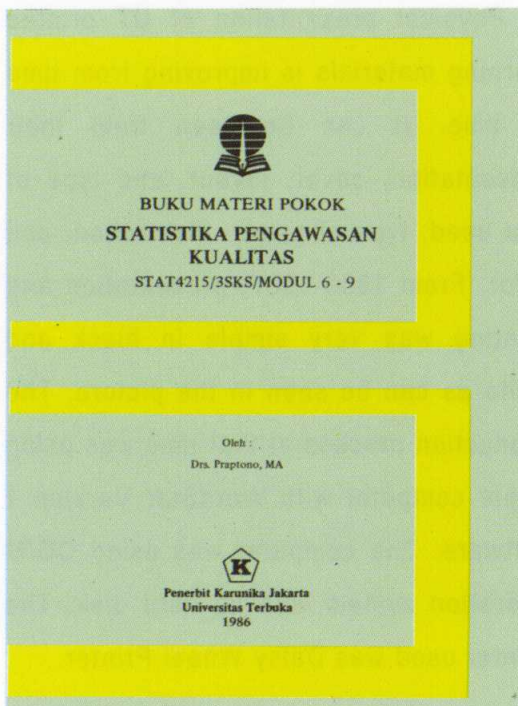
approach is still used even though only for course materials for graduate programs. The development of course materials for diploma and undergraduate programs use Writer-Editor approach.

Development of Content Format of Printed Course Materials

UT printed course materials contain learning materials that should be studied by students in accordance with learning purposes set in the course outline (GBPP). The course material is known as complete self-learning or self contain course materials which mean that students primarily only require to study those course materials in order to achieve their learning goals. Beside those self contained course materials, there are also courses in which learning materials are developed by using textbooks or part of it supported by a study guide. These kinds of materials were used at English programs managed by *Lembaga Pengembangan Program Pendidikan Bahasa-UT (LP3B-UT)*, in cooperation with Cambridge University 1990. Additionally, graduate programs also used this type of course material before 2001. But in 2001, UT decided not to use these materials any longer. This decision was made considering the different characteristics between textbooks and self- learning course materials. In addition, it was difficult to ensure the availability of textbooks in the market around so that UT began to reduce the use of textbooks as a primary course material.

Quality improvement of UT course materials in every aspect, including format, is a continuous process. The format of self contain course material is basically designed to help students learn effectively. UT has been in operation more than two decades, and during that period of development there were some changes in the format of course material.

During the period of 1984-1987, the format of UT printed course materials consisted of several components which were: Introduction, General Instructional Objectives (GIO), Specific Instructional Objectives (SIO), Learning Activity (including explanation and examples, exercise, guideline for doing exercise, summary, formative tests, feedback and follow-up, keys to formative tests, and reference. Those components are to be found in every course material. In this period, one course book (BMPs) was divided into two parts. For example, course book for 2 credit unit courses consist of Book one which covered module 1 to module 3 and Book two which covered module 4 to module 6. Since 1988, UT course material used the same format, but all modules were printed in one book. In 1997, there was a little change in the format, in which the overview of the subject was presented at the beginning. In addition, GIO and SIO were incorporated in the introduction part of every module, no longer separated from the introduction part.



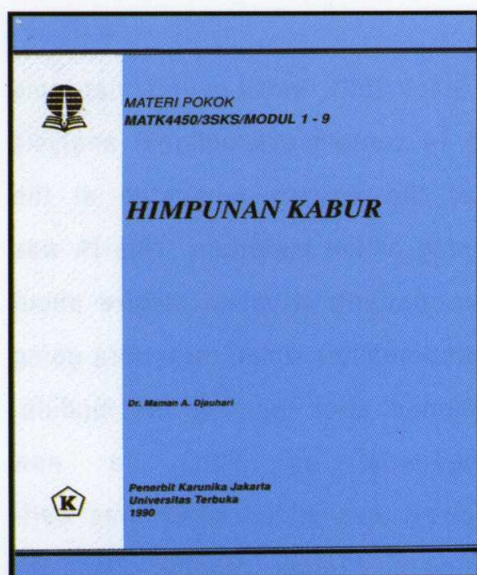
Cover during 1984-1987 period

Since 2001, some course materials began to contain instructional analysis (IA) of the subject presented at the beginning of the materials. This IA was to give students a whole picture about the competencies which they were going to obtained after learning the module. Subsequently, in 2003, a new component was added which was Self-Assignment (*Tugas Mandiri-TM*). UT decided that TMs were integrated in course materials. TM is a task to be completed by student independently,

and it contributes to their final score if they send it to UT Regional Office (UPBJJ).

By integrating this component, all students are expected to have it when they buy each course material, considering that it was difficult to obtain TM before it was printed as part of the course material. Since 2003, almost all course materials have had Map of Competencies. A new development in 2006 was that TM no longer integrated in course materials since it meant to be distributed to students on-line, and was employed as self exercises to be done independently.

Improvement of Layout, Printing , and Presentation



Modules of 1987-1998 period using type setting in Linokey machine

Physical presentation of UT printed learning materials is improving from time to time. It can be seen from their presentation, cover, layout, and type of font used, type of paper, illustration, and color. From 1984-1987, presentation and printing was very simple in black and white as can be seen in the picture. The production process at that time was using Apple computer with WordStar Version 1 software. The computer was using CO/M operation system with no hard disk. The printer used was Daisy Wheel Printer.

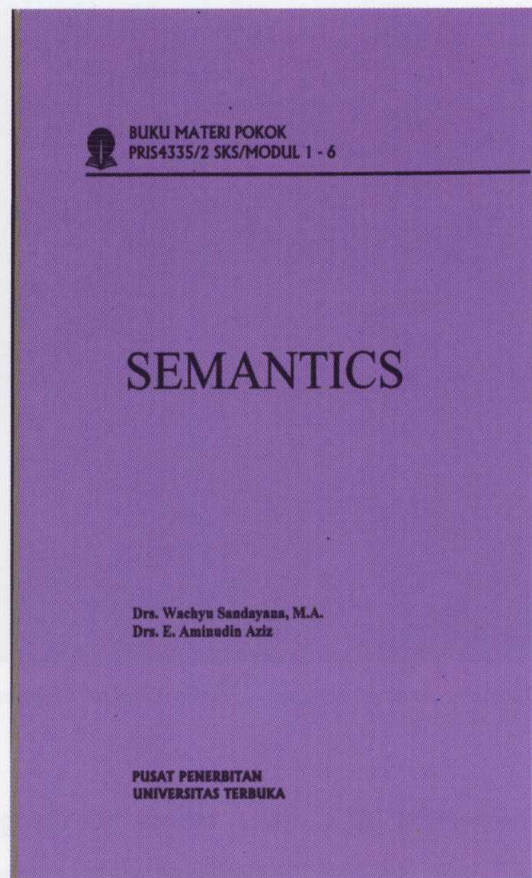
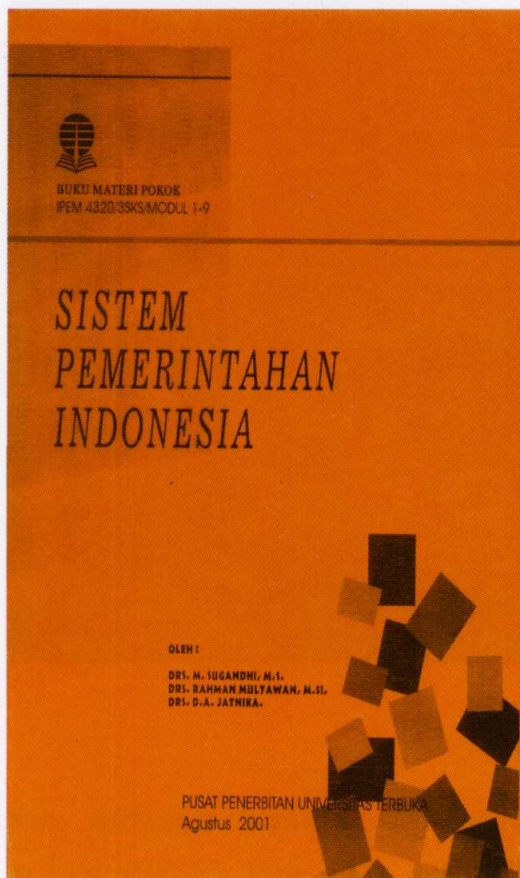


Dummy preparation by PPBAC staff/Team

Illustration was made manually, using pencil, ruler, eraser, typewriter, and brushes. As the illustrations were made manually, there were not integrated in the layout; instead, there were put in separate pages attached to the master. For mathematics course modules, the formula and symbols were also done manually.

From 1987-1988, the production process and presentation were improving slightly. To improve quality, in 1987 a type setting machine (Linokey 100) was used. This machine produced high quality type sets, but the process took longer because the layout was done manually. This machine was used only for a short time because of difficulty in getting spare parts and maintenance. For illustration,

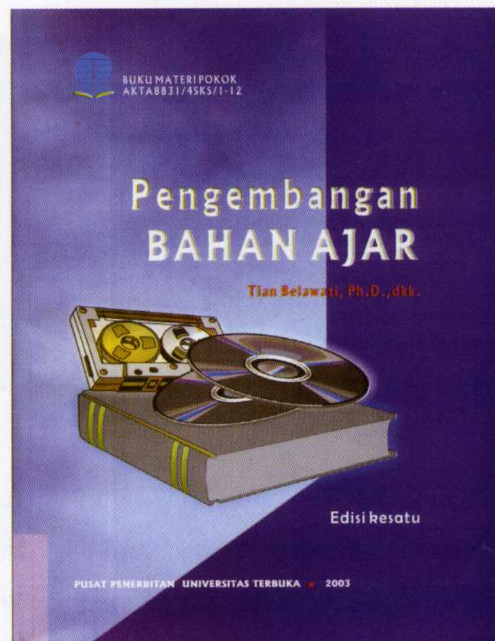
Apple Macintosh with Free-hand software was used. This technology resulted in better typing and illustrations.



A significant development in the production of printed course materials from 1989 to 1999 was the use of desktop publishing technology with laser print and Windows operation system and Page Maker program. With this technology, the process of layout, page composition, and font variation became an easy task. Since 1991, Apple computers were gradually replaced by IBM computers, except for illustrations. Mathematics modules were typed by using ChiWriter program. In 1993/1994, all Apple computers were replaced by 386 IBM-typed Personal Computers, which were then replaced by Pentium I. The software used was

Microsoft Word Version 2 for typing (including mathematics modules), and the layout was done by Page Maker Version 4, and then Version 6. CorelDraw was used to make illustration. The process and management of learning materials became easier with the advancement of computer technology and network system. It enable the integration of all computers in to a network to process the master print of course materials. For that purpose, server ACER ALTOS 7000 was used. With this system, the use of computers became more efficient. In addition, accessibility and documentation were easier, more organized and secured.

From 2000-2006, there were some changes in the use of hardware and software. Computers used for typing and layout were Pentium III, and for illustrations computers Pentium IV were used. During this period, the master copy for printing was done by Microsoft Word. The presentation, including cover and layout and color, matches the color for each faculty.



Module's cover of 2003 – 2006 Period: Sample

learning, and the non-printed materials purpose as support. This is a common practice done by other distance education institutions, such as United Kingdom Open University (UKOU).

At the beginning, the non-printed materials were consisting of audio cassettes, radio programs, and television (tv) programs. In line with the development of communication and information technology, other non-printed materials were also developed, such as audio graphic, Computer-Assisted Learning, web-supplement, and interactive video. The media of delivery also developed, not only through radio and TV broadcasts, but also through internet.

Television program

TV program was the first non-printed media developed by UT. Television media for learning was introduced to the public in unison with the official inauguration of UT by the President of the Republic of Indonesia in 1984, which followed by a general lecture on economics by the late Professor Sumitro Djojohadikusumo, a famous national guru of economics in Indonesia.



Production Activities at The Centre for Multi Media Production

The first The first TV program was produced in cooperation with The Centre for Educational Technology and Communication, Ministry of National Education

(*Pusat Teknologi Komunikasi Departemen Pendidikan dan Kebudayaan-Pustekkom Dikbud*), as at that time UT had not have its own studio to produce television programs. In 1986, UT set up a small studio with equipment such as cameras and editing tools donated by the Japanese government. Since that time, UT has produced its own television programs.

In accordance with the development of UT, the quality of non-printed learning material also improved. After two years of preparation, in 1994 a special studio to developed and produced non-printed learning materials was built. This building is called *Pusat Produksi Multi Media* (Multi Media Production Center), with 2 television studios measuring 12 x 18 m completed with adequate control rooms.

From 1984 to 1992, UT was broadcasting its television programs through national TV (TVRI) once a week. In 1992, UT also had a chance to broadcast its lecture programs through *Televisi Pendidikan Indonesia* (TPI) station 4 times a month. But since February 1998 TPI has declined to broadcast UT lectures to none at all. It caused major concern as TPI, by definition, should have broadcasted more education programs. Apparently, more commercialized popular programs were dominated their TV programs.

On October 1997, the Department of Education and Culture (*DEPDIKBUD*) was offered to use *Cakrawarta* satellite owned by *Indovision* to broadcast education programs. This channel was specially planned to broadcast education programs, including UT. The offered was enthusiastically welcomed by UT, and since 1998 UT has started to schedule its educational program to be broadcast through this channel. But it could not be implemented as planned due to some constraints, and it appears that this channel was no longer used for education, although UT still had time allocation. In 2000, there was privatization in this company, and it was called Quick Channel or Q-Channel. From 2000 until now, UT televised program on Q-Channel is allocated one hour a day. On the other

hand, since 2004, UT TV programs have been broadcast on new educational channel owned by the Department of National Education, called *Televisi Edukasi*. Time allocation for UT on *Televisi Edukasi* was one hour a day, and until 2006 UT has produced 582 TV programs.

Video Program

UT started video programs in 2001 when it was decided that the supporting non-printed materials should be assembled in form of multimedia package. The video program was supposed to illustrate further the basic concepts explained in the printed course material. It was called Video Courseware (Video BMP). Until 2006, there were around 75 courses which used video programs. The videos were in the VCD format, considering that was the most popular player owned by students. In future, it is quite probable that DVD will be used as it gives better quality of pictures.



Audio cassettes as supplementary materials

Audio Cassette Program

Audio program was used to enrich the printed course materials. Some subjects, especially languages, were highly dependent on audio program. For other courses, audio cassettes were developed to enhance the first half part of course materials. Audio programs were developed along with the course material

based on course outline. After three years it was decided that not all courses should be accompanied with audio cassette. Audio supplement was considered suitable only for courses which need it, such as courses in language. Audio programs were also used as supplementary materials in 1988/1989 when UT was assigned to implement diploma DII for elementary school teacher training programs. Each course for this program was supplemented with a package of cassettes (containing 10 cassettes). The cassettes were not distributed to students individually, but to each study club. This distribution was discontinued in 1990s when the curriculum changed.

Even though audio cassette programs were no longer developed, UT still develops radio programs for national radio station (RRI). Furthermore, there was also attempt to produce radio programs in audio cassettes and sold to students. But not all radio programs were produced in audio cassettes, only those serial programs consisting of four, six, or eight radio programs with the duration of 25 minutes. So, audio cassette package for certain subjects consists of two, three, or four cassettes.

In 2001, it was decided once more to employ audio cassettes integrated as a package of multimedia learning materials. This program was called audio course or audio BMP. The audio part was to give more emphasis on important topics related to the course material. Up to 2006, UT had supplemented 115 courses with Audio BMP programs.

Radio Program

UT had developed radio programs since its establishment. These programs were for the second half part of each course modules. Radio programs were developed alongside with course development and based on course outline. In 1986 it was decided that not all courses should have radio programs, but only those whose materials were appropriate to be presented on radio. As the number

of programs to be produced was large and the capacity of UT studio was limited, the development and production of those materials were assisted by *Pustekkom* and BPMR Semarang and BPMR Yogyakarta. Up to now, UT had produced around 200 programs each year, and those programs had been broadcast through local radio stations in each region. So far, UT has produced around 3,474 radio programs.

Audio-graphic Program

Another audio media developed by UT was audio graphic program. This program integrated audio and graphics (text and picture). This program was initiated in 1991 with the concept that audio program could help explain text and pictures in printed materials. The presenters were lecturers (mostly from outside UT) who were accustomed to explain concepts in class room. One course could have 4 to 6 audio graphic cassettes. These programs were offered to students who needed them. Considering the low students' attention of these programs, the further production was ended only two years after introduced. But in 1995, there was an emerging need for audio graphic programs as the content of printed materials should be further explained with the support of audio, especially those with formula, graphics, pictures and charts. Therefore, voices of tutors were added through audio cassettes complemented the text materials. Texts and pictures were placed at the back part of modules, on separate booklets, or on the cover of the cassettes. Audio-graphic programs were also used as supplementary to multi-media learning materials. Thus far, there had been 12 courses which supported by audio graphic programs.

Computer-assisted Learning Program

Along with the rapid advancement of technology, UT had made some efforts to use it to produce learning materials. From 1992-1996, when Prof. B. Suprpto was the Rector of UT, a new media was introduced, that was Computer-Assisted Learning (CAL). During this period, some teams were formed to develop CAL programs. These were computer-based with texts and animation programs. Besides explaining some concepts, these programs were also provided students with exercises and feedback. The main purpose was to make students learn interactively with CAL materials. Each development team developed the CAL, began from scripts writing in to designing the actual program. UT has been producing about 75 programs upload on UT website, in which 26 of them were to supplement the multi-media learning package. These programs are also available for public who access to the internet.

Internet-based Learning Materials

(Web supplement)

One type of computer related learning materials developed by UT is supplementary material which can be accessed through internet. The basic concept for the web-based supplement is to provide students with current progress in the subject matter area which haven't accommodated in the printed course materials because generally it is only be revised after seven years. Apart from keeping abreast of new development in subject area, web supplement is also used to enrich the existing course materials. With many advantages of internet network connections, students could be guided to access other related sites relevant to their learning. The development of web supplement was initiated in 2002, and thus far there have been 120 courses which are supplemented with web supplement.

Interactive Video Program

Another form of computer-assisted program developed by UT in 2003 was interactive video program. Basically, it is a computer-assisted learning with video enriched visuals. This program was developed when UT opened graduate programs. Most graduate courses offered are accompanied by these interactive video programs. Up to now, there have been 19 courses with interactive video programs.

Multi-media Learning Package

Since 2001, the learning materials used by UT students have been printed and non-printed materials, or multi-media learning packages. Non-printed materials in the form of radio and television programs are function as support and not compulsory. However, selected programs which are appropriate and closely related to printed course materials are included in multi-media learning package. So, most learning materials produces by UT can be optimally utilized by students.



Multi-media learning package

Based on UT Strategic Plan 2005-2010, at least 25% of courses offered should be in the form of multi-media packages. From 2001 to 2006, UT had managed to produce 247 multi-media course packages. Multi-media package consists of printed course materials (BMP) and non-printed course materials, such as audio programs, audio graphics, videos, computer-assisted learning materials, and interactive videos. All of these non-printed materials are developed as enrichment to the existing printed course materials, except for certain subjects, such as languages or music courses which use non-printed materials as part and obligatory of the learning materials. For this purpose, non-printed materials were integrated into printed course materials.

Quality Assurance of Course Materials

Since course materials are very essential in distance education, UT has made some effort to improve not only the physical presentation but also their content of course materials. Since 2001, UT has declared a policy that printed course materials should be revised after seven years of uses. As course material revision takes about 1 to 2 years, a revision can begin when the materials are 5 years in use. Therefore, in the 7th year's course materials are revised and ready to be used further.

Another effort made by UT to ensure the quality of learning materials is by applying a system of quality assurance. In 2001, some standardized procedures were developed with regard to course material development. The purpose of the standard was to guarantee that the process and product meet the agreed quality. In order to meet the assurance quality of management process of course development, UT has made some efforts to get international recognition. One of them is through ISO. In 2006, UT was ready to get ISO in the development of

printed and non-printed course materials, and got it in 2007. All efforts in getting the recognition were in line with ever increasing services to UT students.

Conclusion

As a distance education institution, it is reasonable that UT really pays attention to the quality of its course materials, whether it is printed or non-printed, because the key to the whole educational processes are the quality of course materials. UT keeps improving the quality of its course materials in terms of their presentation, layout, content, and quality. The continuous quality improvement shows that UT is determined to "become one of leading distance education institutions in Asia in 2010 and the world in 2020".

Tutorial as Learning Support

IRMA ADNAN AND DEWI PADMO

Learning Process in Distance Education System



In distance education system, learning process is marked by self-study. Self-study does not necessarily mean that students have to study on their own, but it means that learning initiative should come from the students themselves. In this case they can study on their own or form a study group, or do consultation about their learning difficulties to the person in charge in an educational institution. Although self-study is required, managers of distance education cannot escape from their obligation to provide learning support services for the students. Learning

support should be provided since there are various types of student's characteristics in terms of age, educational level, study habit, study skills, or their readiness and ability to study on their own.

Therefore, learning support services should be provided, even if there is small number of students actually utilize it.

In general, learning support services are any form of services given to the students in order to make their learning process happen as expected from enrollment process, learning process, examination, and getting the result. In particular, learning support services are the services given by the educational institution to students in studying their course materials or when the learning process actually takes place (Belawati, 2000). This can be in the form of tutorial. In distance education, tutorial can be done either face-to-face or at a distance by means of various media.



Face-to-face tutorials are learning support conducted by face-to-face meeting between tutors and students. Meanwhile, distance tutorials are learning

support given through various media such as radio, television, telephone, internet or correspondence. Face-to-face tutorials in distance education system are different from face-to-face lecturing. The aim of tutorials is to assist students and to give feedback in their process of mastering important concepts of a particular learning material, not as a main source of learning such as in lecture.

The Development of Face-to-face Tutorials

At the beginning of the UT establishment is 1984, face-to-face tutorial mode had been offered to the students. At that time, tutorials were attended by about 80% of the students, but at the end of second year, it appeared that the attendance was diminished to 25% on average (Setijadi, 1982). This information was based on some reports on tutorial activities at the Regional Offices which concluded that students were lacking motivation to attend the tutorials. In the beginning, there were quite a number of students who attended tutorials. However, in the following tutorial sessions, their attendance rates decreased. This continually happened until 1998, so that some Regional Offices actually stopped performed face-to-face tutorials since 1993.

Realizing the importance of tutorial in supporting students learning, UT tried to reorganize its tutorials. The policy of rerunning tutorials in all Regional Offices was applied in 1999 by giving incentive as much as 2 million rupiah per tutorial package to the Regional Offices conducting tutorials. The Regional Offices were liberated to determine the tutorial mode. In order to receive the incentives, a proposal had to be submitted to the Vice Rector for Academic Affairs, and then it was reviewed by Vice Rector for the Student Affairs. The review was considered in the decision of eligible Regional Offices that were received tutorial incentives (Wardani, 2003).

In 1993 there were 13 Regional Offices receiving incentives to conduct tutorials, while in 2000, the number was increased up to 18 Regional Offices (of which 12 of them ran face-to-face tutorials, 2 of them ran written tutorials, and 4 of them ran tutorials by radio). In semester 2001.1 the number of Regional Offices that ran face-to-face tutorials increased up to 21 Regional Offices with the tutorial incentives as much as 2 to 4 million rupiahs.

From the experience of encouraging tutorials at the Regional Offices from 1999-2000, it was apparent that face-to-face tutorials were the most favored by students. This was reflected from the number of Regional Offices conducting face-to-face tutorials compared to the other mode. Students learning habit which relies more on face-to-face interaction and communication might be one of the reasons why face-to-face tutorials are the most favored one. (Wardani,2003). In addition, in face-to-face tutorials students interacted directly with the tutor and their peers, they were able to express their opinion directly, immediately received feedback, and were able to socialize with other students, staff or managers of education. Face-to-face tutorials were carried out 4 to 8 times. Every session took 2 hours. The general activities consisted of explanation of learning materials, discussion, exercises or other activity needed by the students.

The tutorial incentives given to the Regional Offices which were basically aimed at encouraging them to provide tutorial services proved to work although in a small scale. Based on this success, UT executive managers decided that Regional Offices were ready to provide tutorials without being funded by UT headquarters. Therefore, beginning from semester 2001.2, the incentives had been stopped. Students were charged for the tutorial services and Regional Offices managed them. This was done to empower them in giving the learning support services to the students.

To strengthen the tutorial service system, UT developed a special design of face-to-face tutorial which was literally called specially designed face-to-face tutorials (so-called *TTRMK*). This kind of tutorials had certain and special characteristics which were different from the previous face-to-face tutorials. The characteristics were as follows.

- a. Face-to-face tutorials were carried out 8 sessions per semester.
- b. During 8 sessions, students were given 3 tasks which occurred in the session 3, 5 and 7. Each task was done in class and scored by the tutor.
- c. The task scores (along with attendance scores) contributed 30% to the final score. The attendance score included the number of attendance and students active role in class.
- d. Tutor came from local state universities, minimally having undergraduate (S1) degree, and accredited as UT tutor either through UT Accredited Tutor Program (so-called *PATUT*), Program of Increasing Basic Technique Instructions (so-called *Pekerti*), Applied Approach (AA), or core/local tutor trainings.
- e. Tutorials were carried out at UT headquarter and the Regional Offices cities. Exceptions were made for the cooperation programs with particular requirements. The cost of *TTRMK* consisted of the cost of learning materials and the tutorial fee which were paid by students.

The organizers of *TTRMK* at UT headquarters were Faculties and in Regions were Regional Offices. Therefore, the management of *TTRMK* from the planning, recruitment of tutors and students, the process of tutorials, to the assessment, were Faculties and Regional Offices' responsibilities. In order to make all relevant parties have the same perception of *TTRMK* (especially the Faculties and Regional Offices), guidelines for organizing *TTRMK* were made. These guidelines were continually revised in accordance with the coming feedback. To socialize this mode of tutorial, various things were done, from

letters to the Regional Offices and the Deans, posters, announcement on the radio, sending leaflets to students along with their examination results. Beside that, information on TTRMK was also socialized in the New Students Study Orientation at the beginning of the first year and it was also publicized in all student activities such as general lecture, socialization of student creativity program, or holidays.

At the beginning, this kind of publicity was insufficient to motivate students to attend TTRMK. The number of students who registered to attend TTRMK was small. However, some Regional Offices and Faculties remained conducting this tutorial despite its small attendance. In semester 2001.2, only 2 Faculties and 7 Regional Offices conducted TTRMK. Further on, more and more Faculties and Regional Offices were conducted TTRMK and more the number of courses were offered. As a result there were more students who attended tutorials (see Table1).

From semester 2003.2, TTRMK was offered not only for regular program, but also for S1 program for elementary school teachers. Even the elementary school teachers program required students to attend TTRMK for 3 courses. In addition, the TTRMK was conducted at the study group districts located outside the Regional Offices across the country. This was possible because all students were joining well-organized study groups. Therefore, the management of the tutorials was carried out by the Head of District Office of National Education, while academic and quality control was still held by of the Regional Offices

Meanwhile, from semester 2005.1, the diploma DII program for elementary school teachers also required students to attend TTRMK for 3 courses. The tutors were recruited from high school teachers qualified as tutors and those who had attended tutor training program. Similar to the S1 program the tutorials for this DII program were done in study groups located in districts. The management was also done by the Head of Sub-district Office of National Education, and the

academic and quality control was under the Regional Offices. The Organization of TTRMK for programs for other than elementary school teachers (so-called non PGSD program) is shown in Table 1.

*Table 1. The Organization of TTRMK for non-PGSD program
based on number of courses offered in 2001.2 – 2005.2*

No.	Organisers	2001.2	2002.1	2002.2	2003.1	2003.2	2004.1	2004.2	2005.1	2005.2
1.	FEKON	2	5	6	6	5	4	8		
2.	FMIPA	1	1							
3.	FISIP		2				2			
4.	FKIP		3	4		2		7		
5.	Jakarta Regional Office	3	6	9	16	21	18	22	30	35
6.	Bogor Regional Office			9	9	9	2	11	10	7
7.	Bandung Regional Office	3	4	5	4	3	7	15	15	33
8.	Surakarta Regional Office		1	2	6	10	18	11	20	12
9.	Yogyakarta Regional Office				6	3	3		2	
10.	Surabaya Regional Office	11	8	12	21	16	6	1	1	
11.	Denpasar Regional Office	2	2							2
12.	Bandar Lampung Regional			2				17	24	31

No.	Organisers	2001.2	2002.1	2002.2	2003.1	2003.2	2004.1	2004.2	2005.1	2005.2
	Office									
13.	Bengkulu Regional Office		6	4	8	10	34	24	27	39
14.	Palembang Regional Office	1	5	4	5	10	8	12	15	13
15.	Jambi Regional Office	6	4			4	7	4	4	4
16.	Padang Regional Office	7	10	9	6	9	3	6	12	13
17.	Pinang Regional Office				4	11	15	7	8	8
18.	Pontianak Regional Office		4	4	4	5	15	12		
19.	Banjarmasin Regional Office				5	6	12	9	19	
20.	Gorontalo Regional Office			7	1	4	14			
21.	Makasar Regional Office		2	2	4	6	4	2	11	
22.	Jayapura Regional Office				6					
23.	Medan Regional Center						2	5	8	
24.	Kupang						3	6	8	6

No.	Organisers	2001.2	2002.1	2002.2	2003.1	2003.2	2004.1	2004.2	2005.1	2005.2
	Regional Center									
25.	Purwokerto Regional Center							5	5	16
26.	Semarang Regional Center							2		9
27.	Samarinda Regional Center							2	4	2
28.	Banda Aceh Regional Office							5		
29.	Manado Regional Office								13	6
30.	Kendari Regional Office								6	8
31.	Pekanbaru Regional Office								2	
32.	Batam Regional Office									2
33.	Palangkaraya Regional Office									2
34.	Serang Regional Office									23
	TOTAL	36	63	79	111	134	172	225	244	279

Source : Secretariat of Vice Rector for Student Affairs

It is shown in Table 1 the increasing number of the TTRMK for non PGSD program, in Faculties and the Regional Offices, as well as the number of courses offered. This showed that the Faculties and Regional Centers continuously improved the learning support services through TTRMK. The number of students who attended TTRMK each year was increased, although this was also influenced by the number of courses offered. As time went by, it was hoped that the number of students per course continued increasing significantly. On the other hand, Table 2 shows the number of students of non PGSD program who actively attended TTRMK.

*Table 2. The number of students who attended TTRMK for non-PGSD program
2001.2 – 2005.2*

No.	Organisers	2001.2	2002.1	2002.2	2003.1	2003.2	2004.1	2004.2	2005.1	2005.2
1.	FEKON	8	42	38	43	32	44	45		
2.	FMIPA	18								
3.	FISIP		28				2			
4.	FKIP		15	24		7		49		
5.	Jakarta Regional Office	29	57	110	223	357	301	324	417	382
6.	Bogor Regional Office			75	74	63	167	513	50	92
7.	Bandung Regional Office	44	47	32	38	24	279	248	404	572
8.	Surakarta Regional Office		12	10	99	120	228	79	141	84
9.	Yogyakarta Regional Office				106	99	75		70	
10.	Surabaya	237	286	263	710	405	35	4	9	

No.	Organisers	2001.2	2002.1	2002.2	2003.1	2003.2	2004.1	2004.2	2005.1	2005.2
	Regional Office									
11.	Denpasar Regional Office	47	100							74
12.	Bandar Lampung Regional Office			10				396	196	140
13.	Bengkulu Regional Office		459	137	301	312	413	737	692	956
14.	Palembang Regional Office	8	31	34	64	172	136	240	302	140
15.	Jambi Regional Office	100	50			176	113	80	51	72
16.	Padang Regional Office	46	59	166	144	212	74	114	291	260
17.	Pinang Regional Office				87	80	182	218	45	45
18.	Pontianak Regional Office		75	112	165	247	505	934		
19.	Banjarmasin Regional Office				135	609	1100	877	861	
20.	Gorontalo Regional Office			49	15	19	82			
21.	Makasar Regional		17	12	37	125	102	29	280	

No.	Organisers	2001.2	2002.1	2002.2	2003.1	2003.2	2004.1	2004.2	2005.1	2005.2
	Office									
22.	Jayapura Regional Office				88					
23.	Medan Regional Office						12	277	209	
24.	Kupang Regional Office						49	120	229	93
25.	Purwokerto Regional Office							120	56	100
26.	Semarang Regional Office							168		386
27.	Samarinda Regional Office							58	75	46
28.	Banda Aceh Regional Office							75		
29.	Manado Regional Office								106	36
30.	Kendari Regional Office								477	256
31.	Pekanbaru Regional Office								194	
32.	Batam Regional Office									30
33.	Palangkaray									55

No.	Organisers	2001.2	2002.1	2002.2	2003.1	2003.2	2004.1	2004.2	2005.1	2005.2
	a Regional Office									
34.	Serang Regional Office									343
	TOTAL	537	1289	1072	2329	2659	3638	5705	515 5	498 7

Source : Secretariat of Vice Rector for Student Affairs



Face-to-face tutorial activity

Beside TTRMK, some Regional Offices were also organized face-to-face tutorials (that has no contribution to final grade), either tutorials for regular courses final examination (TFE) or tutorials for written comprehensive exam (TWCE). Even the Regional Offices in Yogyakarta, Surakarta and Bandung, had been giving free face-to-face tutorials for several courses. This was meant to

attract student's interest. Meanwhile, the organizers of tutorials for TWCE were not only Regional Offices but also Faculties. The attendance rates in TWCE were high. Even until the last session, students were still present. This happened because tutorials were highly needed in order to take the written comprehensive examination which was obliged in study program completion. Since 2004, the term written comprehensive examination was changed into final project. And since 2005, the term TTRMK was changed into face-to-face tutorial (so-called TTM). However, all the rules and regulations were similar to that in TTRMK.

Another mode of face-to-face tutorial has been conducted by UT Graduate Program (S2). In this program, face-to-face tutorials are the integral part of tutorial service through internet (online tutorial). Face-to-face tutorials are held four times with 3 tasks in one semester in the Regional Offices (tasks are given by tutors centrally through internet). Simultaneously, online tutorials are held 8 times in one semester and the contents are given centrally. Face-to-face tutorials and online tutorials are obligatory and contribute 60% (including participation mark) to their final mark (*Pedoman Penyelenggaraan Program PascaSarjana*, 2005).

Development of Distance Tutorials

It was realized that the number of students attended face-to-face tutorials was far from expectation. One of the reasons was that most students were working and the distance between their home and their working place is quite far. Considering these factors, UT has developed additional learning support means through other media which was expected to be able to reduce flaws engendered by insufficient reading habit, distance, and time. To add the existing face-to-face tutorials, UT has developed and offers various kinds of distance tutorials through

various communication media such as by mail correspondence tutorials, radio and TV tutorials, and online tutorials through the internet.

Correspondence Tutorials

Correspondence tutorial was tutorial mode marked by the delivery of the written contents, tasks or responses to the student's inquiries through mail correspondence. This delivery can be done directly to the students, through the Regional Offices, or mass media. Correspondence tutorials actually had been offered to the student since UT was established. At that time, written tutorials were just responds to student's inquiries along the year. However, similar to face-to-face tutorials, gradually students were lost their interest. To motivate students to attend tutorials as mentioned above, in 1999 UT has tried to encourage several modes tutorials at Regional Centers through giving tutorials incentives as much as 2 million rupiah per tutorial package.

As a result, in 2000 there were two Regional Centers which conducted correspondence tutorials. Correspondence tutorials were not only responded to student's inquiries but also delivered content to support learning. To increase student's participation rate in correspondence tutorials, it was done in 3 models: (1) tutor answered student's inquiries, (2) tutor sent supporting learning materials and tasks directly to the students, (3) tutor sent supporting learning materials and tasks to the Regional Offices which can be copied or sent to students based on their request. UT policy to stop the incentives made a big impact on the continuity of the correspondence tutorials. Since semester 2001.2 no Regional Offices conducted correspondence tutorials anymore. Instead most Regional Offices conducted *TTRMK*.

Beside the three tutorial models, the written tutorial materials were also delivered in some mass media such as *Komunika* Magazine published by UT and

local papers so that more students could utilize the materials. In relation to this, the Regional Centers were expected to cooperate with local papers so that the written tutorial materials could be published. Besides, the materials were also disseminated through magazines or bulletins published by the students (Wardani, 2003).

Although correspondence tutorials were less attractive, the tutorial packages have been continuously developed by the academic staffs at UT Faculties under the coordination of Vice Rector for Student Affairs. In 2001, 120 written tutorial manuscripts from 30 courses had been written and in 2002, 20 manuscripts from 20 courses had been written as well. In 2003, FMIPA and FKIP also conducted correspondence tutorials, especially for courses such as mathematics and statistics. In fact, the third model of correspondence tutorials which consisted of explaining learning material and giving tasks were employed. The materials and tasks were sent to the students directly or through the Regional Centers. Students were expected to read it, do the tasks, and then sent them back to the Faculties by mail for immediate feedback. This feedback was sent back to the students by mail. This mode of tutorial was still in operation until 2006. Furthermore, since 2005 correspondence tutorial contributes 15% to the final mark (SK Rektor, 2004).

As a whole, the main limitation in carrying out correspondence tutorials was time. The correspondence between tutor and students took plenty of time. Considering the length of time needed to correspondence back and forth by mail, in average tutorial was conducted 2 sessions per semester. This was insufficient in order to provide proper learning support to the students.

Tutorial by Radio

Considering the cost and financial limitation of most Indonesian students, radio is the alternative inexpensive media with high accessibility. Since 1985, UT had utilized radio broadcast as media for tutorials in limited scale, which was once a week with the duration of 25 minutes. Gradually broadcasting time was increased so that in 1991 UT tutorials were broadcasted once a day from Monday to Friday. Then in 1997, UT programs in cooperation with *Radio Republik Indonesia* or RRI could be broadcasted 3 times a day (Monday-Friday) which were in the morning (8.10am), in the afternoon (5.10pm), and in the evening (10.10pm). Then in the period of 2000-2005, UT radio program were reduced to 2 times a day (Monday-Saturday) caused by the change of RRI's organization status from government own institution to public corporation. It was realized that the utilization of this media was not optimum yet, but the efforts had been made by sending six months broadcasting schedule for individual student periodically, while the programs were also accessible through UT website.

The number of radio programs broadcasted was considered modest compared to the number of courses UT offered which were around 400 courses. Students often complained about this. But considering UT dependence on other institutions, in this case RRI, there was little that could be done. Realizing this UT also cooperated with local radio stations to broadcast its radio programs. This cooperation had been attempted by the Regional Offices which functioned as UT branch offices in 36 cities of 27 provinces around Indonesia. Although this cooperation had been instigated since 1996, only 9 Regional Offices including Banda Aceh, Padang, Palembang, Palu, Semarang, Malang, Purwokerto, Mataram, and Kupang could accomplish the cooperation, which unsatisfactorily resulted in limited broadcast time allotments (Huda, Padmo & Kurniati, 2000).

Tutorial by Television

TV is effective and potential media in its capability to present audio-visual information with wide range of accessibility (Verduin, 1991). These characteristics are useful for delivering learning materials for distance education. However, considering the cost for developing TV program is quite expensive, and the process and time needed to develop the program is long, many distance education institutions use TV media only as supplementary media. In addition, the dependence on TV station has made many distance education institutions used TV as limited supplementary media. This condition is also experienced by UT. UT was given small allotment to TV media which was inappropriate for broadcasting its programs. In the past, UT TV programs were broadcasted by National Television Station (TVRI) and Indonesian Educational TV (TPI). On TVRI, the program was broadcasted once a month at 3.30pm, while on TPI it was broadcasted four times a month at 11.00pm.

In February 1998 the broadcasting frequency was cut down drastically as a result of TPI policy of no longer broadcasting educational programs anymore. This was regrettable because TPI was supposed to provide educational service through its programs, therefore it was not in line with its previous mission. This ironic fact actually was pragmatic because running educational TV programs requires idealism which means willingness to provide fund that sometimes is not aligned with commercial aspects of TV broadcasting. Special channel for education is definitely needed and this should relate to national education policy. Considering this high potential media as a means of widening educational opportunities in Indonesia, it is realistic if the government and private sectors care about the existence of TV station especially designed for education.

With the rising educationalist and educators concern with poor educational TV programs, there was an offer to use direct broadcast satellite, called *Cakra Warta* belonging to *Indovision* Broadcasting Corporation in October 1997,

specially designed for distance education. This interesting offer was responded positively by Department of Education and Culture. This cooperation was what it should be, since there was direct relation between national education policy and institution running TV programs. This cooperation was not meant to solve the problem of using communication technology for education. Instead, it was still an early struggle for both parties to support and share benefits to each other. The continuity of this TV program depended on whether both parties carried on their promises to make education a primary need.

TV program through direct broadcast satellite (TV-DBS) was an opportunity for UT to deliver its learning materials. The only constraint was the recipient quality. This was because TV-DBS was a closed broadcast that needed special equipment to receive its broadcast so that it needed a lot of preparations before it can be applied properly.

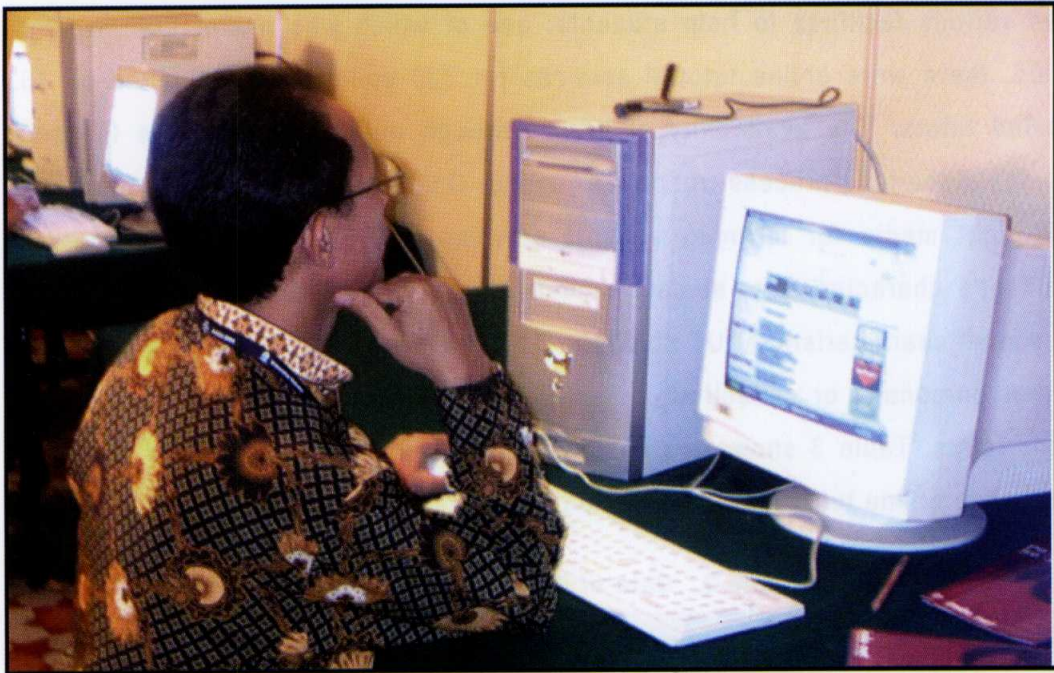
In its development, broadcasting TV-DBS through *Cakra Warta* satellite could not be utilized as learning media as was planned. Finally *Cakra Warta* satellite was employed as cable TV channel called Quick Channel or Q-Channel managed by private sector. Q-Channel gradually became well known because the broadcast could be easily received by the owners of satellite dish and decoder as well as *Indovision* cable TV subscribers. From the year 2000 until 2005 the time allocated for UT was only one hour daily. Meanwhile, since 2004, UT TV programs have been also broadcasted through a new education TV station owned by Department of National Education that is Education TV. Until 2005 the time allocated for UT on the Education TV was only one hour a day.

The use of cable TV either Q Channel or Education TV for UT TV programs was not convenient considering that it was limited to the students who had satellite dish or subscribed to cable TV. However, this could be regarded as an effort to remain utilizing this media while hopeful that in the future there would be better condition. Considering that the cost of a satellite dish becomes

cheaper, it is possible that UT students can afford it in the near future. This actually will increase the use of UT TV programs in the years to come.

Online Tutorial

In accordance with the fast development of information and communication technology, UT keeps trying to give better services to its students. From the year 2000, UT had developed computer assisted instructions (CAI), an interactive multimedia for some courses. Moreover, the quality of the CAI programs has been continuously improving in line with the increasing skills of UT staff in developing it. The strength of the well and professionally developed CAI is its capability of delivering learning material interactively which can surpass an individual teacher, because the development of CAI involves a number of experts who work together on a team. The use of computers at UT is in the form of CAI and internet network. The different characteristics between the two computer-based programs lie on their interactive capacity. CAI is limited to individual learning with one user at a time, while the internet is capable to deliver learning materials to many people at one time. The internet allows the spreading of more flexible education which overcomes the distance, space, and time dimension. Although online tutorials are more superior to CAI, the latter keeps being developed because the students can make use of it by using their PC that does not have to connect to the internet. Therefore, the students who can not access the internet will still have access to the CAI.



Online Tutorial uses Personal Computer (PC)

In meeting the future challenges, UT continuously develops and uses its internet networks. Although student's access to the internet is still very limited, UT has developed support services through the internet called UT Online. Even though the facility of UT Online was available, student's constraint in using it was the cost which was considered expensive and the inadequate infrastructure condition in many parts of Indonesia. Considering that this media was the most powerful interactive media in distance education system, UT and internet providers should be able to cooperate in order to help students. In the future, the use of computers either network-based or not will be more intensified in accordance with the development of computer technology.

The computer-based media could be used as delivery system of the learning materials and as learning support media. Online learning support was used to overcome the constraints of distance and time. UT online as mentioned earlier

has various facilities to help students, one of which was online tutorial. Until 2005, there were online tutorial services for 330 courses accompanied by 463 skilled tutors. The availability of tutors through online tutorials was to assist students' learning process whenever needed. Online media was also regarded as the right media for learning support services. Considering the diversity of student's characteristics, student's needs to communicate with their tutor is a dominant characteristic of UT students. This media enables them to communicate either personally or collectively to their tutors regardless of distance and time constraints. Table 3 shows the number of courses, tutors, and tutors who have access to online tutorials offered by UT.

Table 3. Data of Online Tutorial 2005.2

FACULTY	NUMBER OF COURSES	NUMBER OF STUDENTS	NUMBER OF TUTORS	NUMBER OF ACCESS	
				STUDENTS	TUTORS
FMIPA	70	369	68	2803	8943
FEKON	49	5473	72	57277	32289
FISIP	108	5615	131	50021	36049
FKIP	78	1237	80	5809	13134
Masters in Public Adm.	12	122	61	12641	5885
Masters in Management	13	198	51	18615	9427
TOTAL	330	13014	463	147166	105727

Source: <http://student.ut.ac.id/mod/statut>

The data on the Table 3 shows that online tutorials for masters program in public administration and management has high students' participations. This was because the online tutorial was obligatory and an integral part of face-to-face tutorial. On the other hand, the online tutorial for diploma and undergraduate programs were not obligatory.

Conclusion

The continuous efforts to give better services to the students are the UT commitment to educate people across the country. Too much reliance on the students' autonomy of their own learning process appeared insufficient; therefore it could not be retained any longer. From time to time UT has been trying to improve its support services in students' learning process. It was reflected in the form of better structured and organized tutorials. UT has begun to take into account the tutorial achievement in the form of percentage contribution to the final grade. The percentage of the contribution depended on the span of control UT took to the tutorial processes. The more controlled tutorial process, the more it has contribution to the final grade. In relation to that, UT concentrates all its efforts trying to improve the quality of tutorials. These efforts should be continued as to reach UT mission that is: to become one of the centers of excellence among distance higher institutions in Asia by 2010 and in the world by 2020.

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Development of Assessment in Universitas Terbuka

AMALIA SAPRIATI & ISTI ROKHIYAH

Development of Assessment Components

In order to acquire accountable assessment results, students competencies should be measured by both valid and reliable instruments. Validity and reliability of assessment system could influence credibility and accountability of academic program.

Students will be assessed after completing the topic or a part of the topic. The aim of the assessment is to recognize student achievement in order to provide feed back either for remedial program (formative assessment) or for grading (summative assesment). UT conducts formative assesment throuh providing formative tests in learning materials (modules).

Furthermore, summative assessment is conducted by providing self-directed examination (*Tugas Mandiri/TM*), tutorial tasks (*Tugas Tutorial*), practical works (*Praktik*), practicum (*Praktikum*), final semester examination (*Ujian Akhir Semester/UAS*), and final program assignment (*Tugas Akhir Program/TAP*).

Self-directed examination (*Tugas Mandiri/TM*). TM is self-directed and without inspection, and it is done by students at about the middle of semester. The main aim of providing TM is to motivate students to learn materials individually or in a group immediately after they register themselves. The students are not compulsorily do TM. TM covers about 50% of materials presented in the module (*Buku Materi Pokok/ BMP/Modul*). In 1984, TM was assumed as mid-semester test and delivered to students as a part of the module. However, since 1990, TM manuscript and the answer sheet were provided in Regional Office and given to students during period of registration. The format of all TM is multiple choice tests, however in 1996, the format of some TM was changed to essay test. This change was based on the characteristic of subject matter and competencies that are measured. Initially, student's answer sheets were graded in the Head Office of UT, however due to the number of students and improvement of quality resources in Regional Offices, providing, distributing and scoring of TM were conducted in Regional Offices. TM was developed in the Head Office by either UT or other university's lecturers. Student's answer sheets of essay test should be sent to Head Office of UT not later than a month prior to semester examination and those answer sheets were scored by lecturers at the faculties. Regional Offices and Faculties sent TM scores to Examination Center for further processes, such as the process of key-in and compiling TM score with other scores (scores of final semester test, practical works, practicum, tutorial) and the process of grading. In order to enhance quality of student services, especially in providing test paper, in 2000 UT presented *TM* in *modul* and in 2002 UT provided TM and its answer sheet in UT website. In 2005, UT provided TM

online on UT website. Hence the students could have access and answer the test item of TM and immediately recognize the number of true answers they made. In 2006, TM essay test score did not contribute to the final grade, and in 2007 the format of TM changed to *Latihan Mandiri* or LM (self-directed practice), namely sets of tasks or tests which were provided for student exercise in order to enhance student's understanding or competencies. LM score did not contribute to the final grade. Initially, contribution of TM score to the final grade was 20% for subjects that requested practical work and 15 % for subjects that did not request practical work. In 2005, the contribution became 15% for all subjects. TM score was effective only for one semester. Generally, final semester test score contributed to the final grade, however due to the students were not compulsorily to do TM, often TM score was not available, and thus could not contribute to the final grade. In this case, the final grade only came from the final semester test score, if the scores of practical work, practicum, and tutorial were not available as well.

Tutorial Task (Tugas Tutorial). *Tugas Tutorial* was provided in several tutorial models. Face-to-face tutorial (TTM/ *tutorial tatap muka*) was the first model of tutorial which was developed in UT, in 1990 for the students of In-service Primary School Teacher Education Program (PGSD). Initially, this tutorial score did not contributed to the final grade, however in 2000 this tutorial score contributed to the final grade. TTM tutorial could facilitate students to have structured and programmed learning and to train their abilities and skills through the tasks delivered that they have from their tutor. Tutorial score contributed to the final grade. In 2000, UT provided the model of electronic tutorial (*tutel/tutorial elektronik*) which contributed 10% to final grade and the name was changed to become online tutorial (*tuton/tutorial online*) in 2004. In 2005, both *tuton* and written tutorial (*tutis/tutorial tertulis*) contributed 15% to the final grade, while TTM tutorial contributed 30% to the final grade. Students

could preferably be involved in all tutorial models and the two tutorial grades were calculated for the final grade. The score of tutorial consisted of score of student's participation and score of their performance on tasks. Each model of tutorial provides three tutorial tasks. Tutors have to score and provide feedback for each student. Since students were not compulsory to attend any tutorial, except in S2 program and certain subjects of primary teacher program, the score of tutorial could not always be available and in this condition the score of tutorial did not contribute to the final grade. Students of S2 program have to involve in tutorial and the score of tutorial contributed 60% to final grade. If a student did not attend tutorial, s/he rely would on the final semester score which contributed 40% to the final grade.

Final Semester Test (Ujian Akhir Semester/UAS). UAS is provided for most of offered subjects in UT program in order to measure student's skills and competencies and to control and evaluate student achievement related to subject matters. Written UAS is implemented for most of offered subjects including the subjects of listening which uses audio cassettes. The subjects of speaking employs spoken UAS, meanwhile teaching practice, agriculture practice, library practice, sports, or arts employ performance UAS. UAS is conducted in certain examination schedule, in certain locations throughout Indonesia which meet the requirements, and at the same time and is supervised by assigned examination supervisors. In 1984, UT ran examination twice a year, however in 1986/1987 UT did it three times a year. In 1987/1988, UT changed again the frequency of examination to become twice a year. This change was to meet effectiveness and efficiency reasons to enhance the quality of student services in registration and grading information. Since 1990, UT ran examination four times a year, two times for primary teacher program and two times for other programs. Contribution of UAS score to the final grade depends on availability of other

scores, such as TM score, tutorial score, practicum score, etc. The contribution could be 100% or UAS score is the final grade if other scores do not exist.

UAS could be multiples choice test (objective test) or essay test or performance test. In 1984, UAS of all subjects were multiple choice test (objective test), thus scoring and grading process were easily to employ by using computer program. Considering content characteristics and competencies measured, until 1990 UAS of some subjects delivered used essay format. Other considerations in determining the format of test were the number of students and quality and availability of resources that influenced the processes and the quality results of scoring and grading.

Initially, the number of test item depends on content characteristic and the semester credit, for example 30 items for the subject that require calculating skills and 60-90 items for other subjects, for semester credit between 2-4 credits. After reviewing and considering many aspects during 2004, in 2005 there was Rector Decree which determined the number of items for each set of test (Table 1). Students write down their answer of objective test on test answer sheet (*LJU/ Lembar Jawaban Ujian*) which will be scanned by optical scanner machine, then scoring and grading will be authomatically proceeded by the machine. Students write down their essay test answer on test answer book (*BJU/ Buku Jawaban Ujian*) which will be manually scored by lecturers.

*Tabel 1. Composition of the number of test items
(Decree of Rector of UT No. 268/J3/KEP/2004)*

COMPOSITION CONTENT TESTED		Σ TEST ITEMS FOR A SET OF FINAL SEMESTER TEST					
		ALTERNATIVE I			ALTERNATIVE II		
CONCEPTS	CALCULATION	TOTAL	ITEM TEST OF CONCEPTS	ITEM TEST OF CALCULATION	TOTAL	ITEM TEST OF CONCEPTS	ITEM TEST OF CALCULATION
100%	0 %	45	45	0	50	50	0
75 %	25 %	40	30	10	45	33	12
50 %	50 %	35	18	17	40	20	20
25 %	75 %	30	7	23	35	8	27
0 %	100 %	30	0	30	-	-	-
Reading		30 items, 35 items, or 40 items					

Practical works (*praktik*) or *practicum* (*praktikum*). The main aim of *praktik* or *praktikum* assessment is to measure students competencies in performing and reporting *praktik* or *praktikum* works. UT developed design of *praktik* or *praktikum* assessment in 1987 and started to implement this assessment in 1989. Students compulsorily take *praktik* or *praktikum* for some certain subjects and they will be assessed. Thus, if a student does not involve in those *praktik* or *praktikum* activities, they will not have the final grade for the related subjects eventhough the student has UAS score. *Praktik* or *praktikum* assessment is implemented in several programs/subjects, such as the programs of agriculture, science, education, sports or the subjects of microbiology, sports education, teaching. Through those subjects, the students are expected to perform certain skills/competencies. Initially, the score of *praktikum* contributes 15% to the final grade and the score of *praktik* contributes 40% to the final grade. However in 2005, the score of either *praktik* or *praktikum* contributes 30% to the final grade.

Professional skills

(PKP/Pemantapan Kemampuan Profesional).

Performance assessment of professional skills in teaching intends to measure skills in certain subjects which will be related to students' profession/occupation/career after the students graduate from the program. UT has implemented this assessment, by conducting performance test or rating practical work report since 1992. Students are assessed through their performed abilities, for example the ability in teaching for the subject of teaching competency (*Pemantapan Kemampuan Mengajar/PKM or PKP*) or in library management for the subject of practice of library work (*Praktek Kerja Perpustakaan*). Trained and experienced tutors will observe and rate the student performance, then they send the score to Regional Office for further process.

Final program examination (Tugas akhir program/TAP). In 1988/1989, UT employed written comprehensive examination (*Ujian Komprehensif Tertulis/UKT*), namely essay test as the final test of the program which consisted of test item of C2 to C6 level of thinking. Furthermore, UKT became the final program examination (TAP) in 2004 and in 2005, most of programs in UT have implemented TAP examination to substitute UKT examination. S1-students who have meet the academic and administrative requirements may take the final program examination (TAP examination). Content of final program examination derives from essential content of core subjects in the program. TAP examination measures high order thinking and problem solving skills. The format of final program examination is essay test, that consists of cases or problems to solve. The students who pass the examination will graduate the program and they will accept certificate of S1 degree from UT.

Development of Assessment Instruments

Prior to 2005, there was a unit in each faculty (*Unit Pengembangan Soal/UPS*) which coordinated test item development and pooled tests item and acted as the Faculty item bank. Since 2005, test item development has been coordinated by each program/department of the faculty and Vice Dean I is responsible for this activity.

Test items were constructed based on test specification in order to maintain the relevance of the tests produced to learning objectives and the test validity and reliability as well. Test specification enlightened the attribute of the developed items, such as competencies and indicators measured, type of item, level of difficulty, and level of thinking. UT or other university lecturers who have expertise in related subjects and meet the requirements develop the specification. Other lecturers who have similar expertise in the same subject review and validate that specification.

UT or other university lecturers who have expertise in related subject and meet the requirements construct test items based on specification determined. Such requirements are necessitated for test item writer, namely experience as a lecturer in relevant subject and participation in training of item test writing provided by UT. Furthermore, for assuring appropriateness of test items to the test specification, other UT or university lecturers who have similar expertise in the same subject review and validate the items. Aspects of review are content, language and item construction. Test items which do not meet the specification have to be revised by reviewer or by the writer. In order to develop item bank system, 10 sets of test items are constructed for each subject.

In 2002, the items that met the specification were processed in application of item bank system at the Examination Center of UT. Prior to 2002, the items arranging of all subject were manually employed. The item sets selected were typed. Meanwhile, in 2002, the processes of item assembling of most subjects

were executed by using application in item bank system. Test papers produced were copied at Examination Center and distributed to all Regional Offices.

Item bank is a kind of setting to pool or deposit selected and calibrated items that could be assembled to become a set of test. Item bank is built in order to increase effectiveness and efficiency in providing test papers. UT initially developed item bank in 1996. In 1998, UT appointed a team which actively developed item bank by attempting to increase item test quality, choosing type examination appropriate to abilities or skills measured, coordinating selection, revision and development of test items, examining opportunities in using computer in examination. Item bank system has flexibility in providing tests based on number of item in a set of test, scope of content, and level of difficulty.

At this time, the items for objective test are collected and computerized in application of item bank, meanwhile the items of the essay test still collected and pooled manually. The objective test items which are collected have been analyzed and reviewed. Each item for each subject is classified on the basis of subtopic and topic, level of cognitive domain or level of thinking, level of difficulty, and index of item discrimination. Level of difficulty can be identified by expert judgment and statistical analysis using *iteman* analysis program. Index of item discrimination can be recognized by statistical analysis using *iteman* analysis program. In 2005, the number of items were collected were about 322.000 items from 662 subjects, or in average there were about 500 items per subject. For each semester, UT conducts the process of test item assembling for each subject referring to each subject test specification (test blue print). This item bank system can enhance the quality of assessment, especially increasing the effectiveness and efficiency in providing of test papers. However, item bank system, collection and assembling system still have to be upgraded and improved in order to enhance services in examination.

Administering Examination

Paper and pencil examination had been the only mode of examination for almost all subject matters (except speaking) offered by UT until 2005, the administration of examination takes place at certain locations (examination sites) throughout Indonesia. As a result students all over Indonesia must sit the examination at the same day and the same time regardless of students competencies.

In order to conduct examination, UT had 32 Regional Offices (*Unit Belajar Jarak Jauh/UPBJJ*) in 1996, and since 2006 there are 37 Regional Offices. In the year 2006, there were more than 700 examination sites, comprising more than 8000 rooms. In general students choose examination site which is near to their homes under the coordination of a particular Regional Office. However in a certain condition, for example in a duty which is far from the previous examination site, a student has the chance to ask permission from other Regional Offices to take examination. UT also has several examination sites out of the country, such as in Dubai, the Netherland, and Australia. Student, whose job is mobile, such as flight attendant, has advantages from the flexibility in choosing examination sites. So that student may plan and propose to conduct exam at a certain exam site according to them, including overseas. For kindergarten and primary school teacher education program, UT defines examination sites at municipal (*kecamatan*) level. This is intended to reach students in very remote areas.

Before the day of examination, students can obtain examination identification card at Regional Office. The cards are produced in UT Head Office and delivered to all Regional Office accordingly. Students are expected to get the card four days before the examination at the latest. This is intended to allow students finding their examination site and room and check the correctness of the subject matter based on what they register. The card also contain information

on the exact date and time they take the examination for each subject matter. At the time of examination, each student sits at the room based on the examination identification card, followed by administering exam for each session conducted by proctors. There are five sessions in each day with 15 minutes break and the duration of each session is 90 minutes. For Non Primary Education program, examination takes place on two Sundays consecutively in May and November. However for the Primary Education program, examination takes place three days consecutively in Saturday, Sunday, and Monday on July and December.

Examination attendance list is developed and produced by the UT Head Office based on students registration. Each examination room for each examination session consists of not more than 20 students. This grouping is based on students registration and examination time table, so that an examination room may consist of several subject matters, considering that UT offers about 750 subject matters. Students are not allowed to sit more than one subject matter in one examination session.

UT Head Office also prepares and arranges examination papers based on students registration. One of the reasons is to make sure that the institution handles those papers safely. Examination paper for each room and each examination session is packed in a sealed envelope based on computerized envelope label. This envelope label is developed and produced at the same time with the production of attendance list and examination identification card. The envelope label describes the location where examination to be conducted, the date, the session, the room, the subject matters and number of each subject matter for each exam room. The sealed envelope will be opened in the designated examination room at the appropriate time.

Regional Office is responsible for administering examination. In order to conduct examination, Regional Offices appoint a committee, persons in charge in examination, including the ones responsible at examination sites, proctors, and

supporting staff. To cover all the persons in charge in examination, Regional Offices hire staff, such as lecturers and teachers from partner's institutions. In case of examination conducted abroad, the Educational Attaché at respective country is responsible for administering examination. Students sit the examination at the Educational Attaché Office or at the place agreed upon, for example Indonesian school. During the examination, students must obey the examination rule. Proctor has responsibility for administering examination, including reporting the finding during examination, such as lack of examination paper, students who is absent and who breaks the rule. Proctors write those reports on an examination record sheet. After exam, the exam papers must be compiled and destroyed at the examination site and recorded on an examination record sheet.

In order to assure that examination is conducted properly, UT has developed manuals regarding the administering and reporting of examination, and if necessary UT appoints staff to monitor examination directly to the examination sites. Student who has indication of breaking examination rule will receive sanction starting from warning, cancellation of the examination result, punishment (grade E) of the examination result, until termination of the student's status. The examination committee who breaks the rule will also receive sanction, starting from warning, postponing from the examination committee or termination as UT staff.

Since 1997, UT has been employing ICT for its instruction in order to improve the quality. In accordance with the availability of web based materials and online tutorials for students, by the year of 2003 UT started to develop online examination. This mode of examination is intended to accommodate students who are unable to attend paper and pencil examination. Online examination also provides individual set test different from set test conducted through pencil and paper test. In order to conduct the online examination, UT has

to develop better infrastructure, especially at the examination site. In 2005, the first trial on online examination was conducted at seven Regional Office namely, UPBJJ-UT Jakarta, Bogor, Bandung, Semarang, Surabaya, Denpasar, and Banjarmasin. Based on this trial, it can be concluded that students give positive response towards the application of online examination. The application of online examination will be beneficial as it gives flexibility to students to determine the examination time table. It gives students possibilities to accomplish their study faster, take examination more than once each semester, and improve student services in examination.

Processing Examination Results

Objective examination results are processed through computerized system. Examination sheets are scanned, loaded, edited, and updated before scoring process. Otherwise, for essay type test results, marking is conducted manually by lecturers. After the essay type test results have been marked, Examination Centre entry the score into the system. In order to ensure the accuracy of score entry process, produce reports and compare them to the original score from the marker. Until the year 2003, after scoring process there was a process called pre- grading before the actual grading, to determine the grading category. However, since 2004, pre-grading processes have been conducted only for new courses. The faculty member defines the grading category (passing grade) for each course. The determination of grading category is applied to all students' regardless students' demographic status. Thus, it can be said that assessment process in UT is standardized. Grading process conducted by computer includes the compilation process of examination result scores with other scores such as scores of face-to-face tutorials, online tutorials, or practical works. Verification of the grading result is done at the end of the assessment process to make sure there is no fault during the process.

As mentioned before, for essay type test results, marking is conducted manually by lecturers. Each of test book marked by two markers with their study background related to the course being marked. Before they start to mark the book, they have to make agreement on the questions in the test book and the related marking scheme. Each of the marker's works independently based on the marking scheme agreed upon. In addition, the marker should be responsible for the marking process, keep confidentiality for both the test and the marking scheme, and obey to the rules that have been defined by UT.

Before the year 2005, marking students result was conducted centrally at UT Head Office by UT lecturers. As the number of UT students grow rapidly the marking system changed, from centralized to regionalized. The markers are lecturers from other prominent universities around Regional Offices. In the first semester of 2005, there were 6 Regional Offices appointed as the centre for marking the essay test results based on human resources availability and demographic points of view. These Regional Offices are Medan, Palembang, Jakarta, Yogyakarta, Surabaya, and Makassar. These Regional Offices receive examination results from other Regional Offices (*UPBJJ Jangkauan*) appointed, as shown in the Table2.

Table 2. Centers of Regional Offices of 2005

No	Center of Regional Offices	Other Regional Offices Covered
1	Medan	Medan, Banda Aceh, Padang, Pekanbaru
2	Palembang	Palembang, Jambi, Bengkulu
3	Jakarta	Jakarta, Bandar Lampung, Serang, Bogor, Bandung, Pangkal Pinang, Pontianak, Palangkaraya, Batam
4	Yogyakarta	Yogyakarta, Surakarta, Semarang, Purwokerto
5	Surabaya	Surabaya, Malang, Jember, Denpasar, Mataram, Kupang, Banjarmasin, Samarinda
6	Makassar	Makassar, Majene, Kendari, Palu, Manado, Gorontalo, Ambon, Ternate, Jayapura

As the result of the students' number for Primary Teacher program, since the first semester of 2006, UT has added two Regional Offices as the centre, as shown in the Table 3 below.

Table 3. Centers of Regional Offices of 2006

No	Center of Regional Offices	Other Regional Offices Covered
1	Medan	Medan, Banda Aceh, Padang, Pekanbaru
2	Palembang	Palembang, Jambi, Bengkulu
3	Jakarta	Jakarta, Bandar Lampung, Bogor, Pangkal Pinang, Palangkaraya, Batam
4	Bandung	Bandung, Serang
5	Semarang	Semarang, Pontianak
6	Yogyakarta	Yogyakarta, Surakarta, Purwokerto
7	Surabaya	Surabaya, Malang, Jember, Denpasar, Mataram, Kupang, Banjarmasin, Samarinda
8	Makassar	Makassar, Majene, Kendari, Palu, Manado, Gorontalo, Ambon, Ternate, Jayapura

Since 2001, UT has managed to process students examination result within 8 weeks after the exam. All student's grades for each semester are printed and sent to the student. Prior to 2002, Examination Center of UT sent grade sheets (DNU/ *Daftar Nilai Ujian*) to students and to Regional Offices (for primary education students) by post. Since 2002, Examination Center of UT has sent the disk of student's grade records to Regional Offices. Furthermore, in 2004, Regional Offices could access to the grade record through internet. Regional Offices printed and distributed the grade sheet to each student or each group of students. Since 2002, UT also has provide information of student's grade online through UT website (<http://www.ut.ac.id>) and on *Student Record System* (SRS) of UT. In 2004, students could obtain information of their grade though SMS (*Short Message System*) service. Students also could request grade sheet of all subject they had (LKAM/ *Lembar Kemajuan Akademik Mahasiswa*). UT provided the

program and the students had to type their student number to request the sheet of their grade list. The LKAM will be automatically printed. Since 2005, UT has provided LKAM *online* on UT *website*, thus the students could have information about their grade. Students have to receive the DNU and LKAM, hence they know their progress of their study and their cumulative index and plan what they have to do in the following semester in order to accomplish their program punctually, as they plan.

Conclusion

Examination system, as an essential component of learning process, is continually developed and revised according to needs and resources. For example, UT has attempted to apply information and technology system in development and management of assessment instruments, administration of examination, and process of exam results. Efforts have been attempted in the running of examination management and process, however those efforts still have to be continually improved in order to obtain more effective and efficient examination system.

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Development in the Utilization of Information and Communication Technology at Universitas Terbuka

TIAN BELAWATI, A.P. HARDHONO,
EDUARD T. SINAR, LINTANG PATRIA

Introduction

Since it was founded in 1984, *Universitas Terbuka* (UT) has developed its computerized management system, especially in processing student registration data and examination. The first design of UT computerized system was developed by UT younger staff and the Center of Computer Sciences of *Universitas Indonesia* (*Pusilkom-UI*). Along with UT development and in order to fit the specific needs of a distance education institution, the development of UT data processing application was conducted with the guidance of registration and

data processing experts from the Open Learning Institute of British Columbia (OLI), Canada.

The application developed until now was called SRS-UT (Student Records System - UT). Under this integrated system, student information can be quickly searched, e.g., the student grade per semester, academic progress, and student projection and statistical data for decision makers' necessities.



UT management of electronic data application

Started from the development of the application, UT has developed various other fields of computer-based applications up to now. These applications have been developed not only to meet the needs of electronic data processing but also to facilitate learning process and internal communication among staff in UT Head

Office and Regional Offices, especially following the implementation of decentralized data processing system. This article about the history of the application of information and communication technology is trying to explore flashback on what had been done by UT in those fields in the past. The exposition of the history will also cover the development of infrastructure needed to support the application of information and communication technology.

Development in the Application of Information and Communication Technology

Along with its changing needs, UT has developed some new applications in order to provide better services to the students. Basically, applications in UT can be categorized into application for general administration, academic administration (*e-administration*), and academic applications to help the students by providing a learning support system that was packaged into UT online portal. Application for administration consists of the followings:

- Distribution and Inventory Application
- Learning Material and Course Profile Application
- Management Asset Application
- General Administration Application (Administration, Official Agenda, and Official Letter)
- Personnel Application
- Library Application
- Research and Community Service Application
- Online Registration Application

The interrelationship of these applications is described in Figure 1. As seen in the diagram, the applications were related by the variable NIP (*Nomor Induk Pegawai* – Personnel Identification Number), NIM (*Nomor Induk Mahasiswa* – Student Identification Number), KD_MK (*Kode Mata Kuliah* – Course ID), KD_BK (*Kode Buku* – Book Identification), and KD_SRT (*Kode Surat* – Letter Identification).

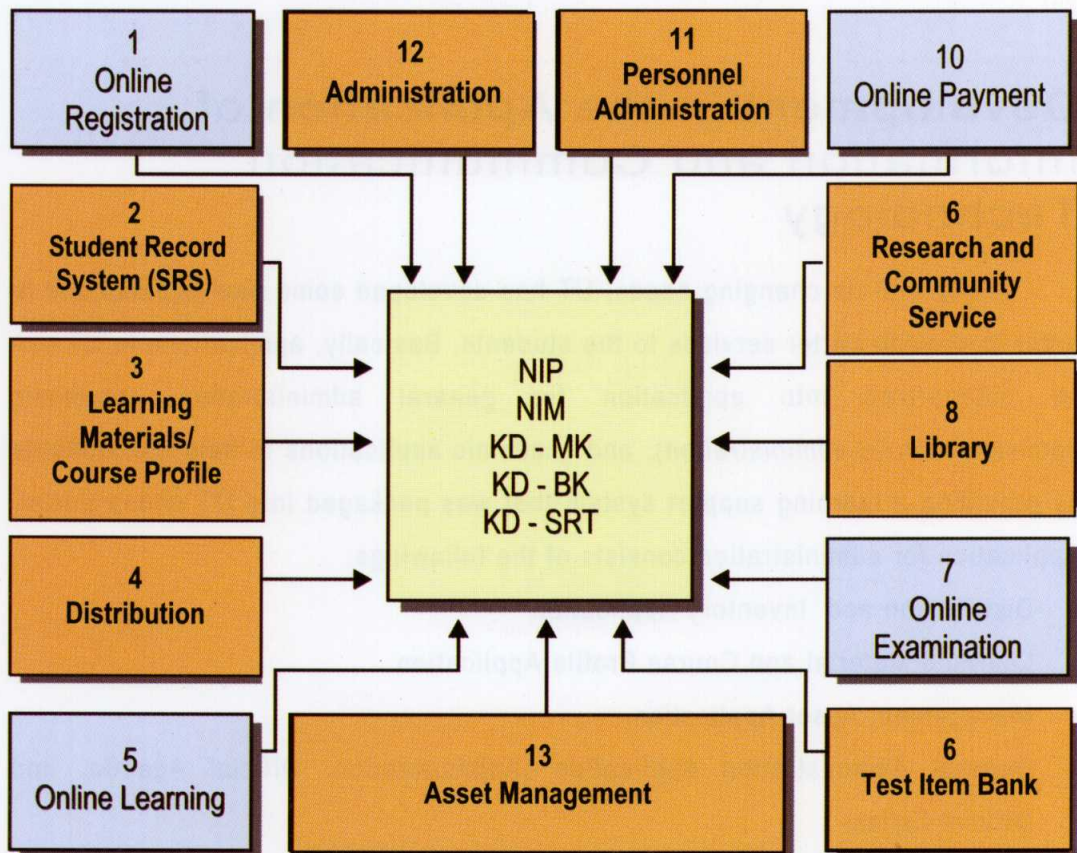
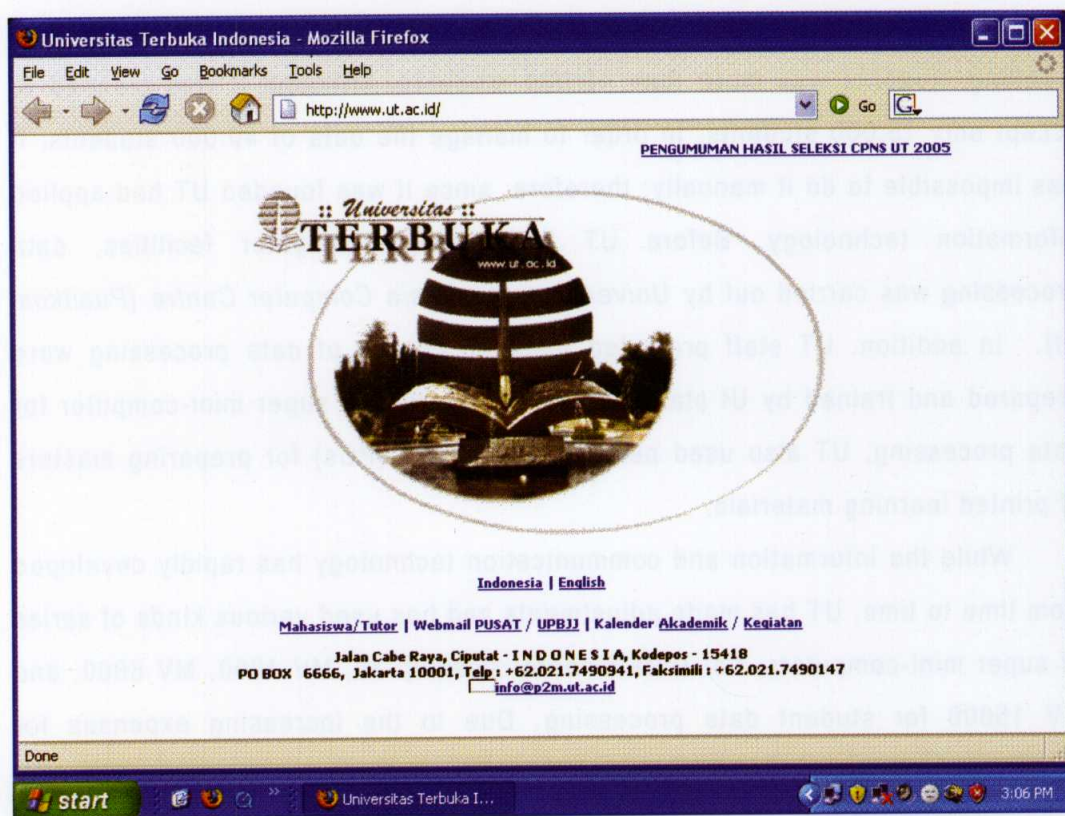


Figure 1. Interrelationship of application for general administration and academic administrator

UT Online conveys general information for prospective students and the general public and provides online services for the students, i.e., online registration, online counseling, online tutorial, online self-assessment, online grade-checker, online self-assessment checker, online journals, and online examination. UT online services can be accessed in the UT portal www.ut.ac.id. In September 2005, UT portal was selected by *Info Komputer* magazine as one of the best three educational portals in Indonesia in 2005.



Front page of UT portal

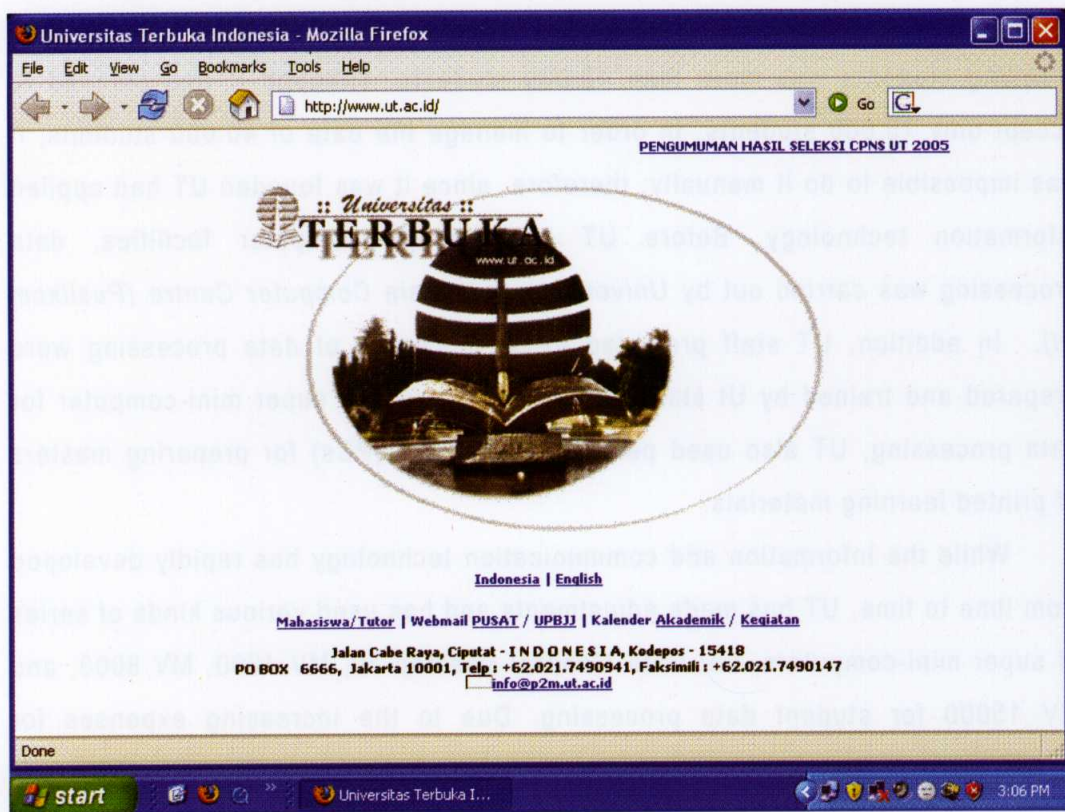
The next priority of development is not focused on new applications, but on resolving the UT problems in network infrastructures in order to utilize the general and academic administration applications that have been developed.

Development of Infrastructure and Hardware

UT was founded in 1984 as the only state university which operates as a single mode distance education system. It has been established as an effort to increase higher education capacities, referring to the early decade of the 1980s, the higher education acceptance capacities in state and private universities was only about 125.000 new students; while senior high school graduates were close to 500.000 students. When UT first opened its registration, the number of enrolling students was more than 40.000 students, although it was planned to accept only 15.000 students. In order to manage the data of 40.000 students, it was impossible to do it manually; therefore, since it was founded UT had applied information technology. Before UT had enough computer facilities, data processing was carried out by *Universitas Indonesia Computer Centre (Pusilkom UI)*. In addition, UT staff projected to be in charge of data processing were prepared and trained by UI staff. Along with the use of super mini-computer for data processing, UT also used personal computers (PCs) for preparing masters of printed learning materials.

While the information and communication technology has rapidly developed from time to time, UT has made adjustments and has used various kinds of series of super mini-computers, i.e. *Data General Desktop 30*, *MV 4000*, *MV 8000*, and *MV 15000* for student data processing. Due to the increasing expenses for maintenance of super mini-computers at that time, the increasing capacities and cheaper prices of PCs, in the early decade of the 1990s, UT decided to migrate its data processing system to PC-based with Client Server architecture. In the early development, UT-LAN backbone was built using *coaxial* cables in the speed of 10 Mbps. UT-LAN network used server with *Novell Netware* operational system using IPX/SPX protocol. The running applications on UT-LAN were developed in DOS-based. One of the weaknesses of using *coaxial* cables among

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the UT buildings was risky in lightning strike. Therefore, along with the more sophisticated fiber optic (FO) and UTP technology, UT backbone was changed into using FO cables, while the connection inside the buildings was replaced by UTP cables. The other change was encouraging an approach to data processing. At first, data registration forms collected in Regional Offices were sent to UT Head Office for scanning process. This process, then, was changed into Regional Office staff directly conducting entry of the registration data. Then, digital data was sent to UT Head Office via internet or in the form of diskette for further processing. For this process, Regional Offices were provided with local area network (LAN) consisting of one server and at least five client computers for Regional Offices that had more than 5.000 students. Regional Offices managing 2,000 to 5,000 students were allocated one server and 3 client computers, while Regional Offices with less than 2.000 students had 2 computers without any connection to LAN. There were two kinds of applications used, i.e. student data management applications for Non-Education Student Program and for Elementary Teacher Education Program (PGSD).

UT Head Office has developed local area network (LAN-UT) that connects many buildings in UT since 1986. In 2006, UT provided some addition and maintenance of the networks as needed, so up to now all of the UT buildings have been connected to LAN-UT.

Table 1. List of Buildings and ConnectionType to UT-LAN

No	Buildings	Number of Connection	Note
1	Computer Center	69	Wire and wireless
2	Rectorate	13	wire
3	Bureau	59	Wire and wireless *
4	Institution	46	wire
5	Examination	83	wire
6	Faculty I	86	Wire and wireless
7	Faculty II	84	wire
8	Convention Center	8	Wire and wireless

9	Library	8	wire
10	Printing House	2	wire
11	Inter University Center	51	Wire and wireless
Total		509	

* Wireless connection only in several meeting rooms.

In the matter of internet connection, firstly UT used connection by means of one telephone line with maximum 56 kbps in speed. At that time, internet applications provided covered e-mail and page of UT portal consisting of various types of information. Because data traffics increased rapidly, in 1996 UT added one more telephone line so that digital communication bandwidth became 112 kbps. In 1997, UT connected to internet via ISP of *PT Indonet*. Now UT is connected to two ISPs, i.e., *PT Indonet* and *Lintas Arta* with the speed of 3 x 128 kbps, so link total was 384 kbps. Communication bandwidth actually is not enough, because there are too many connections to provide, i.e., all internet access in every building at UT with not less than 500 connection in 12 buildings, and access to UT internet services by students and the public. The need of communication bandwidth can be seen in Figure 2.

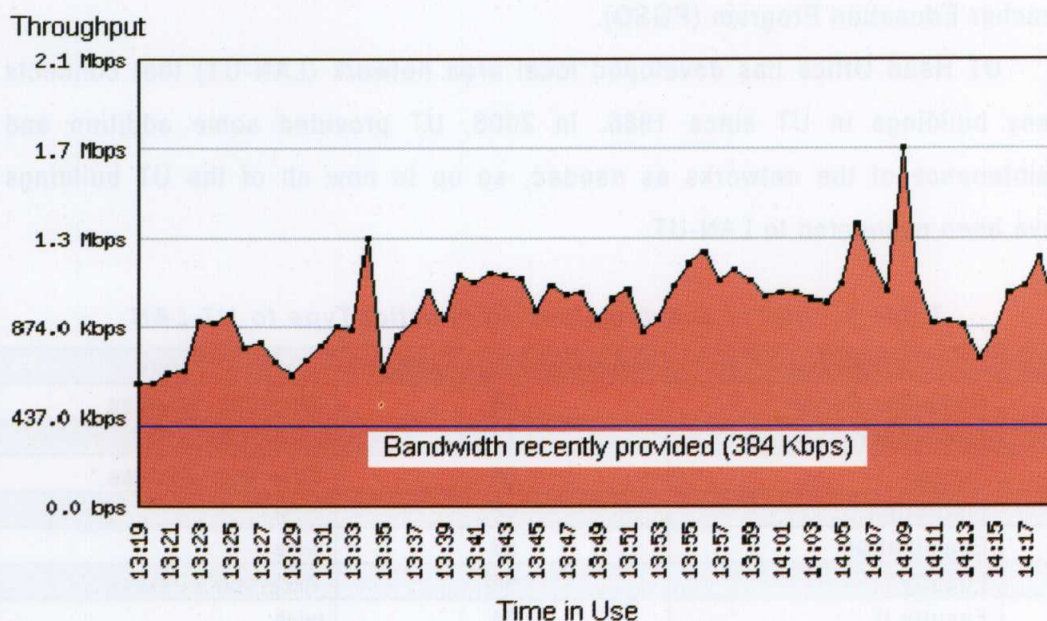


Figure 2. The use of bandwidth in UT

Starting from 2001, UT provided additional computers and its peripheral facilities in Regional Offices. These additional computers were needed to anticipate the impact of the decentralization of registration and printing processes of List of Student Grades (DNU) to Regional Offices. This is also aimed at proving internet connection facilities to Regional Offices. Up to now, all Regional Offices have been connected to internet by dialing-up, except for Banda Aceh Regional Office (via radio-link to Universitas Syiah Kuala) and Banjarmasin Regional Office (via VSAT).

Human Resources

Up to now, there are 22 staff in Computer Center, 17 of them have educational backgrounds related to information system, while the remaining staff get their knowledge and skills in information technology form professional trainings. Besides, the 36 of 37 Regional Offices of UT have been supported by at least one staff that has information system background. Since 2002, UT has applied staff rotation policy consistently, so that skillful staff in information system have been moved out from Computer Center to other divisions in UT to support the development and implementation of information system. Besides that there are several staffs outside of the Computer Center with educational backgrounds related to information system to help develop and implement information system in UT.

Integration in the Use of Information and Communication Technology in Learning Process

The use of ICT in learning process in UT has started since 1996. Firstly, the application of ICT was limited to counseling services through mailing-list

based emails and tutorials. Then, step by step, UT carried out development in the use of information and communication technology as shown in Table 2 below.

In order to encourage the students to use UT online services, UT has made a policy of giving a certain percentage of scoring to the students who are active in online tutorials added to the final grade calculation in every course. Based on the Rector Letter of Decision, online tutorial activities contribute up to 15% to the final semester grade for each course in the undergraduate program, although it is not obligatory for the students to participate in online tutorials. For students of the graduate program, participation in electronic online tutorial is a compulsory requirement and as part of an integrated tutorial system with the face-to-face mode of tutorial.

Table 2. The Steps of information and Communication Technology Development in Learning Process.

No	Usage	Year	Amount	Note
1	Consultation	1996	1	One email address: info@mail.ut.ac.id
		2001	40	Each Department has its own email address
2	Electronic/Online Tutorial	1996	4	Mailing-list Based
		1998	40	Target of Online Tutorial Increased 30 courses per annual
		1999	60	
		2000	80	
		2001	135	Web-based with <i>Manhattan Virtual Classroom (Open Source LMS)</i>
		2003	201	
		2004	171	Web-based with <i>Moodle (Open Source LMS)</i>
		2005	330	
		2006	363	
3	Supplementary	1998	40	Target of online tutorial

No	Usage	Year	Amount	Note
	Material	1999	60	increased up to 30 courses per annum.
		2003	73	
		2004	36	
		2005	35	
		2006	53	
4	Online Course	2002/ 2003	7	Discontinued because based on research findings, students have difficulties in downloading course materials due to bandwidth limitation.

The Use of Information and Communication Technology in Information Services and Academic Administration

In order to provide better services to the students and along with the development in the use of internet in Indonesia, UT has established various kinds of information and academic administration services through UT website. These services include online registration, examination mark announcement, Student Academic Progress Report (LKAM), and online examination. Additionally, UT provides Interactive Voice Response (IVR) and short message system (SMS) services. The IVR service is an interactive telephone service for many kinds of information, i.e., examination marks, schedules, etc. The information service via SMS is a service from which the students can get information by sending SMS to the calling number 6736 (for *Mentari* and *Matrix* card users) and to calling number 3949 (for provider other than *Indosat*). Today, this SMS service is being developed into transmitting SMS by which UT can automatically send important announcements to the students whose mobile numbers have been registered to this kind service. Transmission of SMS services will be provided to all students in any cellular operators.

The development of ICT truly presents new ways in doing a lot of things. Generally in educational context, the application of ICT can increase the efficiency of organizational operation and expand the reaching-out capability of the institution, which in effect makes the institution having greater opportunities to enhance its competitive ability. Therefore, in the self-evaluation context, ICT aspects need to be reviewed in terms of how far the institution has applied it and what efforts have been carried out to encourage its application.

Challenges and Opportunities

As stated above, an institution that has the ability to utilize the results of ICT development will have greater opportunities to enhance its competitive ability. One of the advantages of using ICT development in education is opportunities to present flexible learning activities in various dimensions, i.e., place of study, time of study, means of communication with experts, seeking resources, kinds of media used in studying. This flexibility, then, can make the limitation between distance education and face-to-face education has blurring boundaries through the use of ICT. Such flexibility has so much attraction and has been sought by any individuals so that educational institutions which can offer flexibility in learning activities should have greater competitive ability and more appealing power to students.

The challenges will be clearer if the institutions are not just applying ICT to increase internal organization efficiencies, but they should also achieve the strategy of increasing the range capacity and competitive ability in its educational process which is reflected in its academic rules.

Earlier, it has been discussed the opportunities as the result of ICT application. The critical question that has to be answered is how far the opportunities can be efficiently and effectively utilized by the institution in increasing internal competitive ability of the institution. If there is no such a question, another question that could be put forward is how far the institution has made effort to take the opportunities. This question can be answered by noting how far the policy is directed, especially to respond to the opportunities. Then, the policy can be tested by means of looking at the investment as an effort to realize it. Investment in this case can be seen in the areas of infrastructure, human resources development, cooperation with other capable institutions, as shown in the following Table 3.

*Table 3. UT Investment in Developing Information and Communication Technology
2001-2006*

Investment	2001	2002	2003	2004	2005	2006	Note
Hardware and software			1,016	1,306	1,046	1,901	Fund Allocation: Billion Rupiah
HRD							
• New recruitment	7	3	21	22	15	11	ICT Staffs
• Training			2/44	1/18	5/108		Activities/Participant
Connection development							
• LAN	9 fiber-optic (FO)			+4FO	Giga Switch	+4FO	FO: 100 MBps
• External		1Wifi 128K		2Wifi 256K		3Wifi/ 384K	
Cooperation in using ICT		Warintek W-Net Warnet		Indosat SMS		JakSoft SMS broadcast	Increasing Accessibilities of the students

Based on the above comments, it can be summarized that UT has various kinds of internet-based application. These applications have not yet optimally been used by the students and Regional Offices because of limited connection. During this period, the students have difficulties in accessing UT website, because UT communication bandwidth is not appropriate. It is expected that after this program has been carried out, the students can be facilitated to access UT online services and that information provided and delivered by UT can be immediately accepted by the students. By connection facilities in Regional Offices, it is expected that the students can access UT from the Regional Office with comfort, low cost and easier connection.



Universitas Terbuka Library, from Conventional to Digital

EFFENDI WAHYONO, HERWATI DWI UTAMI

Introduction

The presence of a library as a learning source in an educational institution is a must. UT library has been established since as long as the establishment of UT as a distance education institution. At the beginning, it was a part of Educational Media Production, Informatics, and Data Processing Center. This Center, based on the Letter of Decision from Minister of Education Number 0470/0/1992 about UT Statute, was then developed into three Centers, namely Computer Center, Multi Media Production Center, and Library. With the recent change into UT new structure in 2005, the name of UT library was changed again to become Library Service Center called *Puslata (Pusat Layanan Pustaka)*.



Library service center building

Considering several barriers in giving services to students spreading throughout Indonesia, UT library was designed only to fulfill the needs for learning material development services and general services as a distance education institution. In accordance with this function, the library focuses its collection on subject matter relevant to the development of UT learning materials and to enrich distance education literature.

Students living near UT Head Office can use the library services by reading the library materials on site, while those living far from Head Office can use services of other libraries available near their residence, such as library service from local state higher education institution. Since the establishment of UT, several local libraries have given special rooms for UT students called UT corner. The room can be used by the students as a learning place or a

discussion place. Since the frequency of students' attendance at that time was not significant, the corner was merged with the reading room for other readers.

Networking

As a distance education institution, UT library does not operate by itself. Networking is a key success for UT library. Therefore, since the beginning, UT library has established networking with other state higher education institutions all over Indonesia. Consequently, UT students can have access to the library near to their places. It has also established networking with the national library collections in regional areas.

As a state higher education institution library, its activities have referred to library programs conducted by Directorate General of Higher Education. Therefore, UT library was involved when the Directorate General of Higher Education worked on Project for Higher Education Development funded by foreign aids in 1988. One of the important components of the Project was Coordinating Unit for Library Activities (*Unit Koordinasi Kegiatan Perpustakaan* or UKKP). This Unit has been established as government effort to develop a library network for state higher education institutions in Indonesia. Through the network, there is possibility to jointly use the state higher education institution libraries, and then *Pusat Layanan Disiplin Ilmu (Pusyandi)* or Centre for Scientific Services has been established. Through *Pusyandi*, it was expected that the library service can be optimized. Students from different higher education institutions can get similar services available through this library networking. The collection development center is managed in accordance with *Pusyandi* center. Other higher education institution libraries can use the collections developed by *Pusyandi* libraries.

There were eight state higher education institutions to be developed as *Pusyandi*, while others were expected to be members that can use the collections

developed by *Pusyandi*. The state higher education institution libraries developed as *Pusyandi* are expected to deliver the information of new collections they have developed. UT library, which is not a member of *Pusyandi* networking, can use the collections developed by those eight *Pusyandis*, either through the internet or facsimile. The purpose of this networking is to have opportunities to develop a service system among libraries. The eight *Pusyandis* are describe in Table 1.

Table 1. The Pusyandis

No.	Higher education institution	Subject matter developed
1	University of Indonesia, Jakarta	<ul style="list-style-type: none"> • Law • Arts and Humanity • Library, Computer, and Information
2	Bogor Agricultural Institute	Agriculture
3	Institute Technology of Bandung	Technology
4	Bandung Institute for Teacher Training and Educational Science	Education
5	Gajah Mada University, Yogyakarta	<ul style="list-style-type: none"> • Social Science • Basic Science • Economics
6	Indonesian Arts Institute, Yogyakarta	Culture and Arts
7	University of Airlangga, Surabaya	Medical and Health Sciences
8	Institute of Technology, Surabaya	Marine technology

UT library along with other five higher education institution libraries were among the first libraries to be the member of *Pusyandis* networking (Directorate General of Higher Education, 1991). Those libraries were Padjadjaran University Library, North Sumatra University Library, Hasanuddin University Library, Jakarta Institute of Teacher Training and Educational Science (now State University of

Jakarta) Library, and Malang Institute of Teacher Training and Educational Science (now Malang State University) Library.

To facilitate the work of library networking, UKKP developed library automation programs. Through the automation, data processing in the library was operated using computer. UKKP uses automation program developed by UNESCO, called CDS/ISIS. This program was developed for automation of libraries in developing countries so that the program could be used for free and could be developed as needed. UKKP conducted training for the library staff of state higher education institutions to become system managers for library automation. Apart from giving software and staff training, UKKP also provided hardware, such as computer programmed with CDS/ISIS and facsimile machine.

With the provision of the software and hardware, all libraries of state higher education institutions, *Pusyandi* or its members, have to implement library automation. In 1994, UT library cataloging system was retyped in CDS/ISIS format. Since 1995, all of UT library catalogue has been stored in the data center. With the development of LAN network at UT, in 1996 library collections service can be accessed by LAN (intranet) and internet.

In 1996, UKKP activities began to decrease, due to the ending of the World Bank project. Several libraries started thinking about how to maintain the network. Several libraries in Central and East Java then initiated to develop a cooperation forum for state higher education institution libraries, called *Forum Kerjasama Perpustakaan Perguruan Tinggi Negeri (FKP2TN)* or Partnership Forum for State Higher Education Institution Library. Because of a technical problem, the membership of FKP2TN was limited to state higher education institution libraries located on the island of Java. Initially, membership of FKP2TN was limited to state higher education institutions under the Department of National Education. However, because of the demand of several IAIN (State Institute of Islamic Studies) libraries, the membership was extended to include state higher education institutions within the Ministry of Religion, such as UIN (Islamic State University), PTAIN (State Higher Education of Islamic Studies), or

IAIN (State Institute of Islamic Studies). One of the aims of this forum was to increase the fulfillment of information need for library member, and to increase the human resource quality for library member (Aslam, 2004). In 1996, UT library joined the FKP2TN.

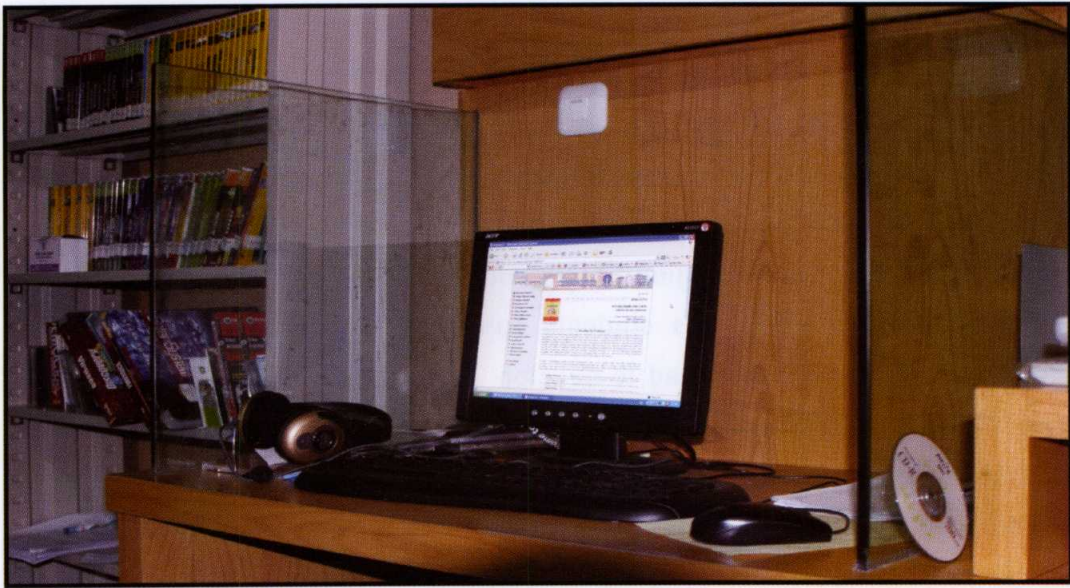
FKP2TN was the most strategic forum for UT in increasing the library service for its students. As the member of the forum, UT students can use the state higher education institution libraries available near their places of residence, both those libraries within the Ministry of Education and Ministry of Religion. FKP2TN conducted an annual member coordination meeting in turn. UT library was the host of FKP2TN Member Workshop in 2001.

Becoming Digital Library

Digital library or virtual library is information networking which has activities to integrate all kinds of library services in a digital or virtual coordinating organization so that it becomes widely distributed information through a communication network of global internet.

The strengths of digital library compared to the conventional library are as follows.

- Access by users: wherever, whenever, easier, and faster.
- Collection materials: available in various formats (printed, audio/video, and digital).
- Information source can be used broadly, either using its own source or other libraries through internet networking.



Digital Library can be accessed via UT Online

Several reasons for UT in developing digital library:

- The huge number of UT students.
- UT students spreading throughout Indonesia.
- Distance learning system.
- Difficulty in communicating conventionally with students.
- As an institution, UT has to deliver academic and other information services fairly to all students.
- The strategic role of library as an information source in globalization and information era.
- Various information, in all kinds of format, such as textbook, journal, proceeding, magazine, video, cassette, CD, and microfiche.
- To achieve the UT vision as a centre of excellence in information dissemination in open and distance education.

UT digital library has been developed over a long period of time, in accordance with the development of UT infrastructure in data networking. In

1996, UT started to develop virtual networking. Its Computer Center and Media Research Center conducted trainings to its staff in order to develop a web-based system for UT. From the training, each unit at UT was expected to develop a website containing information related to its units. The staff of UT library also participated in the trainings. At the same time, libraries in all over the world developed what was called digital library, virtual library, or electronic library. As a university library which has students spreading throughout Indonesia, even abroad, UT has been challenged to develop an electronic library. It has actively sent its staff to participate in trainings and seminars related to digital or electronic library conducted by several institutions outside UT, such as University of Indonesia, Bandung Institute of Technology, and the Indonesian Academy of Sciences (*Lembaga Ilmu Pengetahuan Indonesia* or LIPI).

The development of information and communication technology has supported and enhanced the development of digital library. UT plan to develop mini library in each Regional Office has been moved to the development of digital library since the cost can be potentially cheaper and more efficient.

One of supporting factors in developing digital library was the automation of catalogue collection process, since UT library catalogue has been programmed in CDS/ISIS and stored in a data base. The problem was at that time ISIS could not access through the internet. Experts from abroad and Indonesia, then developed ISIS under windows program so that the catalogue can be accessed via internet. After that, UT library transferred CDS/ISIS 3.07 version into windows program and then developed digital library. In 1998, its catalogue can be accessed via internet. In the same year, in an Asian Association Open University (AAOU) meeting at Hong Kong Open University, there was an agreement to make a library network among the AAOU members. However, that idea was not yet realized, it was only an information exchange among the members by electronic mail.

Even though its format was still elementary, UT library information can be accessed through UT website since 1999. The UT library has also developed

general information about UT and put it into the website. In 2000, it started to digitalize parts of its collections, especially local content materials, such as research collection in distance education and thesis or dissertation from UT staff which is related to distance education.

Copyright became a problem in digitalizing the collections. A break though was needed to cover the problem. An effort which can be done was permission from the writers of research reports, theses, and dissertations to be digitalized. Such effort had positive responses from UT academic staff since there were easy permissions from them to digitalize their research reports.

At the same time, ITB sponsored the establishment of Indonesian Digital Library Network (IDLN), and UT library becomes a member of IDLN. As a member, it can put the digitalized collection into IDLN.

Beside local content materials, UT library also digitalized abstract, table of content of the journal and book collections. Since 2004, it also digitalized UT learning material. Next, it also digitalized audio video collections. Other collections were brochure, photos, newspaper clipping, and documentation related to distance education.

Through digital library, UT library is trying to develop online services for the following materials:

- Catalogue, including table of content and abstract of journals.
- Research, theses, and dissertation findings (abstracts and full texts).
- UT learning material.
- Learning material supplement.
- Literature trace related to material used in writing UT learning material.
- UT general information.
- Distance education information.
- Online catalogue.
- Photocopy service at a distance.

Human Resource Development

At its establishment, UT library did not have librarians. In cataloging its collection, UT was assisted by part timers from other libraries around Jakarta. Library service was made available by administrative and academic staff from four Faculties of UT. In line with the increasing collections, the broadening of subject matter, and the users' demand for services, professional librarians therefore were needed. However, the problem was that there was no recruitment opportunity for librarians since UT concentrated on academic staff recruitment needed by the Faculty. To overcome this problem, UT has sent academic staff from its library to participate in continuing education programs or taking the second bachelor degrees in library sciences.

Director General of Higher Education (*Dikti*) through UKKP provided opportunities to library staff from several state higher education institutions in Indonesia to study library sciences at the post-graduate (S2) abroad, undergraduate, or diploma 2 levels. In 1988, UT library sent two of its staff to study library science at the post-graduate (master's) program in the United Kingdom. Several years later, UT sent additional two staff to participate in further education in library sciences for a double degree at the University of Indonesia (UI), and three staff to take a Diploma 2 in library science at Bogor Agricultural Institute. In terms of formal education, UT paid tuition fees for staff studying library science at UI (S1) and at Universitas Pajajaran taking Diploma 3 in computer science. In 2001, UT gave opportunity for a staff member to study library science at UI. They then become the main staff for further development of UT library.

Beside formal education, UT library also sent its staff to participate in training programs and courses for librarians focusing on library management funded by *Dikti* or on library application program funded by UT. The training funded by UT was usually related to training for digital library development.

Every year, UT allocated funding to increase human resource quality, usually in the form of internship, seminar, or workshops.

However, until 2001, UT did not have functional librarian staff. Those who have formal education in library science, since they have background as academic staff, tend to choose their career in functional academic position while those administrative staff who have had participated in library science (Diploma or S1) choose their career in administrative positions.



In 2001, UT library had four formation for librarian functional positions, two person for S1 and three for D3. However, after selection process, those from S1 were not accepted, therefore only those from D3 were accepted as new library employees to fill librarian functional positions. Those were the first librarian UT has ever had. In 2004, again it has a formation for librarians (S1 and D2). The applicants from S1 were not accepted since they were the same applicants who have been rejected before. Finally, UT library only accepted two applicants from

D2 library graduates. Therefore, until now UT library has only five librarians (three of them from D3 and two of them from D2). The rest was administrative staff and academic functional staff who based in the Faculty.

Besides that, UT library also have human resources who has developed special skills in journalism. UT library which at the beginning was called Educational Production, Informatics, and Data Processing Centre, has a task to publish a magazine as communication media between students and UT. For the task, UT coordinated with *Yayasan Himpunan Masyarakat Pecinta Buku (Himapbu)*, an NGO which has activities in reading interest development. At first, the magazine was called *Mandiri*, however since the permission from Ministry of Information was not issued, therefore it was published temporarily under the name of *Paket*, or camouflaged as "*Paket Belajar Mandiri*" in order to be available for UT students. It was published in May 1985 and had a good response, as it was proved by the reprinting of the first and second editions with the publication volumes of 15.000 copies.

In 1985, *Himapbu* was dismissed and some of its staff became UT staff who was placed in library. *Paket* experienced ups and downs. Production cost was not covered by UT anymore and consequently it was not published regularly. In 1987 *Paket* tried to have partner. The management of *Kartini* magazine then became partner in order to keep it published. By having partnered with *Kartini* magazine, the name of *Paket* was changed to become *Kampus* and used as student magazine which was broadly published not only for UT students but also for other conventional campus students. *Paket* staff that had been the UT library staff moved to *Kartini* office in Jalan Garuda, Jakarta Timur.

The publication of *Kampus* was similar to *Mandiri*. Ministry of Information did not issue the permission. The cooperation with *Kartini* was over, *Paket* finally was ended in 1988. *Paket* staff who had been working at *Kartini* office was moved back to the UT library.

The need for communication media was still felt important, therefore *Suara Terbuka* magazine was published as an internal communication magazine among

UT staff in Head Office and in Regional Offices. The first edition of the magazine publication in March 1989 was completely used as media for dialogue among UT staff. Through this media, UT staff can give critics and have dialogue with UT decision makers openly. Since 1994, *Paket* staff, apart from publishing *Suara Terbuka*, has had a new task to publish *Komunika* magazine, acronym from *Komunikasi Universitas Terbuka*. The magazine, which was first published in 1994, has served as communication media among UT students and between UT and the students. To increase the knowledge of library staff who manage the magazine, UT library has sent its staff to attend various training programs in journalism. In 1999, both magazines was no longer managed by the UT library. However, some library staff stayed as the management for the two magazines.

Apart from the publication of some communication media managed by UT itself, in order to improve services to students, UT has also developed cooperation with several local and national newspapers. For instance, UT has cooperated with *Harian Umum Pelita*, either to publish written tutorial materials and or to deliver information to students. For the same need, at the beginning of 1990, UT cooperated with *Tabloid Mitra Desa* in Bandung. Among local newspapers which have cooperated with UT, *Mitra Desa* has been the most effective media of communication, either among students or between UT and students. This magazine has regularly contained both news of UT and written tutorials given by UT staff to students.

Development of Library Collections

As mentioned above, UT library at first was designed to support the availability of library materials for course writers and UT for staff in designing distance education system which at that time had no model to replicate in Indonesia. At its establishment, UT started to develop several study programs which were in great demand by the society. The development of library collections focused either on subject matter in these study programs developed

by UT to for support learning material development or on collection related to distance education.

Entering the third year, many more study programs were offered by UT. Library collections also developed accordingly. During these years, academic staff felt the need to perform three fundamental functions of the university (or so called *Tri Dharma Perguruan Tinggi*), namely teaching, research and community services. Because of the increasing demand for library services, UT library needed to develop its collections in various subject matters, not only for the need of writing learning materials and distance education management, but also for the needs of students, researchers, and UT staff.

In 1999, UT formulated its vision to become a center for excellence in the delivery, research, and information dissemination of open and distance education. In accordance with this vision, UT library also focused itself on the development and information dissemination of open and distance higher education. Library materials related to this vision was expected to be made available abundantly. This effort has lead to the development of UT library to become digital library.

Library Office

UT library has moved several times. At first, it was allocated a space in the second floor at UT Head Office at PSB IKIP Building in Rawamangun, Jakarta Timur. When UT Head Office moved to Pondok Cabe in September 18, 1985, the library office also moved too. At first, it was allocated a space which is now called Operations Room in *Gedung Umum* (General Building). All of University administrative activities focused in this building. Not long after that, *Gedung Rektorat* and *Gedung Umum* (now called *Gedung Lembaga*), was ready to use. Rector and Vice Rectors moved to Rectorat Building (*Gedung Rektorat*) while *Biro Administrasi Umum dan Keuangan* (General Administration and Finance

Bureau) moved to General Building (*Gedung Umum*). In 1988, the Library moved again and it was broaden to become a half of the first floor.

In 1991, the Learning Materials Distribution Center (now called Learning Materials Service Center) moved to a new place. UT library was placed in the formerly Warehouse Building of the Distribution Center, which at that time had been developed to have the second floor. It occupied a half of the first floor in the area of 450 m². In 1997, UT was allocated a project by the Directorate General of Higher Education (*Ditjen-Dikti*) for library building in the area 2000 m² (four floors). However, the monetary crisis in Indonesia made the building development was ended abruptly and it then continued in 1999. In 2000, it moved again to a building which was designed specially and permanently as a library building so that it was easier for it to focus on developing library programs, especially in order to support the achievement of UT vision and in accordance with its name, *Pusat Layanan Pustaka* (Library Service Center).

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Developments in Cooperation and Partnership

AGUS SARYADI, UDIN S. WINATAPUTRA

Introduction

From the beginning Universitas Terbuka (UT) has been designed as a unique and "incomplete" institution of higher education, meaning that it is a non-conventional (distance) higher education institution which does not own its own facilities as conventional (face-to-face) institutions. Therefore, UT needs various types of external resources to facilitate its operations management. UT does not have the sufficient resources of its own to support its distance education system, which allows flexibility as students are not required to attend face-to-face lectures on campus. For this reason, it is more appropriate to consider UT as a higher education institution that manages resources available internally as well as externally. In other words, UT can operate well with the support from its partner institutions.

In the beginning, cooperation and partnership with UT was established limited to the development and distribution of learning materials, examination materials, and registration services. Nowadays UT cooperation and partnership have become more complex in line with the development science, technology, and the changing needs of the society. Broadly speaking, there are three types of cooperation relating to:

- A. Academic Development
- B. Operational Activities
- C. Student Recruitment

Cooperation in Academic Development

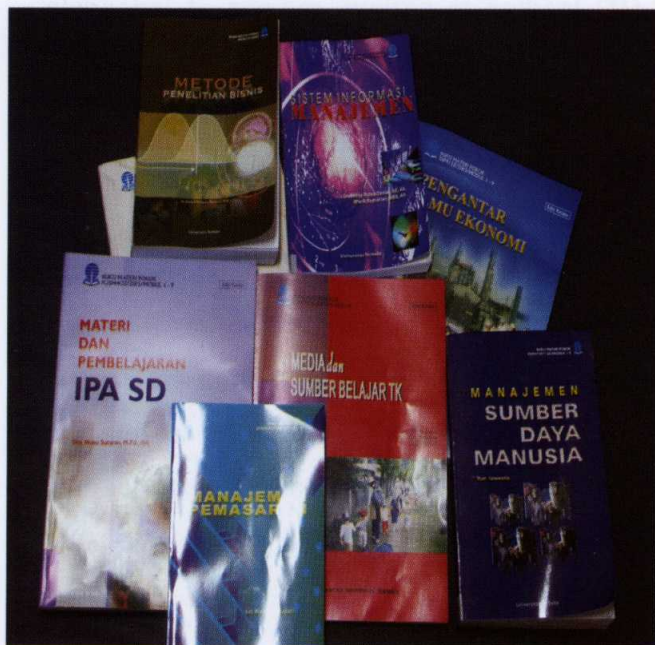
The UT primary working partners in the use of academic resources are the state universities. The roles and functions of the state universities are significant in developing the UT Regional Offices, known as *Unit Program Belajar Jarak Jauh Universitas Terbuka (UPBJJ-UT)* located in various regions of Indonesia. The state universities play their roles not only as the provider of academic resources but also as the supervising partner institution for the Regional Offices across the country so that UT educational programs can reach all segments of the community, including those living in remote areas.

As mentioned earlier, in the beginning, the academic development of UT could be conducted thanks to the support and partnership with the state universities throughout the country. This partnership has continued until today, and it has even been expanded to selected private higher education institutions. The UT academic development includes areas such as curriculum, learning materials, tutorials, and examination.

Curriculum

Teaching-learning process in educational endeavor can take place when there is curriculum available as its main reference. In the beginning, the UT curriculum was developed jointly with content experts from the state universities. In the next stage, the UT academic staff develop the curriculum themselves and then external experts are invited to review the curriculum. Additionally, some UT partners also request UT to develop the curriculum, then followed by joint discussion about the curriculum. In both cases, a curriculum review process is conducted jointly by UT and its external partners irrespective of whether the curriculum development has been initiated by the UT experts themselves or by the external experts. The UT partners in curriculum development include those content experts from the state universities as well as from the stakeholders, such as experts from the industries, business, entrepreneurs, and other users.

Learning Materials



Utprinted learning materials

The learning materials (module) developed by UT are categorized into printed materials and non-printed materials, such as those in the form of audio/video recordings and broadcasting. Like curriculum development, learning material development also involves experts from the state universities. However, there are also possibilities of involving experts coming from



UT non-printed learning materials

the business world, industries and other agencies who have competencies in their respective areas. For courses in economics, for example, UT can invite the nationally-renowned economists from *Gajah Mada University* as its course writers in economics. Experts from the business world or other agencies can also contribute to the development of learning materials in their respective fields. Generally, UT learning

materials have been developed by invited experts from prominent national higher education institutions such as *Universitas Indonesia (UI)*, *Institut Teknologi Bandung (ITB)*, *Universitas Gajah Mada (UGM)*, *Institut Pertanian Bogor (IPB)*, and *Institut Keguruan dan Ilmu Pendidikan* or *Teacher's Colleges* that have now become comprehensive universities.

In order to produce quality learning materials, there are systematic steps to take. The activity begins with a workshop on module writing. As the printed modules are new content to be used as the main learning resources at UT, various aspects of module writing are discussed during the workshop, such as content, format, structure of the module, and design presentation of the learning materials. Besides, UT also develops multi-media learning materials such as audio/video recordings, radio/TV broadcasts, computer-aided learning, and internet-based learning.

Tutorials

The UT educational programs are delivered using distance education system. Yet, this does not mean that there is no face-to-face tutorial at all. Periodically, UT conducts face-to-face sessions or tutorials. Tutorials are different from lectures. In tutorials, tutors enrich students' learning, guide students to independent learning and to overcome learning difficulties. Students' questions during tutorials are directed to address their problems in understanding the learning materials.

Prior to tutorial activities, tutors are trained to ensure that they have the competencies to conduct tutorials effectively. Although they are usually lecturers or experts in specific field of study, they need to be equipped with methods and techniques to conduct tutorials. The tutor trainers are senior lecturers and professors from the local state universities or private universities, or experts in the field that are available in local government agencies and institutions. For example, the instructors for the In-service Teacher Education Program come from the local Office of Education.

In line with the development of information and communication technology (either through the use of telephone, facsimile, or internet), tutorials are also conducted using electronic means of communication, which is called electronic tutorial. With personal computer equipped with internet facilities, UT students can attend interactive internet-based tutorial, using their own personal computers or public internet facilities such in internet kiosk (called *Warung Internet* or *Warnet*). To enhance learning activities through electronic tutorial (called *Tutorial Elektronik* or *Tutel*), UT cooperates with a number of internet providers, such as *PT Wasantara Net*, *Koperasi Komunitas Telematika* or *Koperasi Warnet Indonesia*. Online tutorials are managed by tutors who are also academic staff at all faculties at UT.

Other than internet providers, UT has also cooperated with some newspapers and magazines to conduct tutorials through printed media. Since the early 1990's, *Mitra Desa* newspaper, which belongs to *Pikiran Rakyat* newspaper group in Bandung, has established partnership with UT to allow written tutorials published in the newspaper. A similar format of partnership has also been established with *Surya 45* newspaper in Surabaya.

Examination

Ensuring the quality of examination results requires quality test item writing. Like other academic areas such as curriculum, learning materials and tutorials, test item writing is done by cooperating with local state universities. To ensure quality standards, cross reviews of the test items are applied. The test items written by UT academic staff are to be reviewed by content experts from the state universities. On the contrary, test items developed by lecturers from the state universities are to be reviewed by UT academic staff.

At the end of the semester, UT administers final semester examination. Broadly speaking, examination is administered for two major programs, i.e., basic education (*Pendidikan Dasar* or *Pendas*) and non-basic education (*Non Pendidikan Dasar* or *Nonpendas*). The examination for the *Pendas* program is usually administrated in July and December, while the examination for the *Nonpendas* program is conducted in May and November. The examination is administered on Sundays so that it will not disrupt the activities of examinees who are mostly working adults. The examination is administered on campus and in elementary as well as secondary schools. The people involved in the examination administration include the personnel in charge of the examination location, examination supervision and examination proctoring are appointed from the UT own staff. UT also recruits additional personnel to supervise the examination from local schools. This has been made possible because of the

partnership between UT and local governments at district level and the local Office of National Education Agency that allows UT to use available school classrooms and the recruitment of the school teachers to become examination proctors.

The quality of examination depends not only on the quality of the test items developed but also on the marking and processing of the examination. Broadly speaking, there are two kinds of examination processing and marking, i.e., computer-based processing for objective type tests and manual processing for essay type tests. In the beginning, the computer-based examination processing was conducted by the Computer Center of *Universitas Indonesia (UI)*. This partnership with UI was not only related to examination processing, but it also further included the training of UT staff at the Computer Center so that examination processing could later be conducted by the UT staff themselves. Currently all the examination processing is conducted by the UT own Computer Center.

For essay-type tests, the marking was carried out by the UT academic staff at the Headquarters, and since 2004 it has been done by academic staff in UT Regional Offices. The markers are recruited from the local state or private universities and the recruitment process is based on the cooperation between UT and the local state or private universities. Therefore, the academic staff work load in examination processing in the Headquarters can be reduced, and the result of the examination processing can be kept in high standard and objectivity can be maintained.

Cooperation in Operational Activities

Beside cooperation in the academic field, UT also establishes partnership and cooperation with other agencies and institutions to facilitate its operational

activities. Those activities include registration, delivery of learning materials, payment of tuition fees, and other academic support areas.

PT Pos Indonesia

This particular government agency was used to be called *Perum Pos dan Giro*, which later has restructured and renamed itself to become *PT Pos Indonesia*. Since the beginning of its establishment, UT has cooperated with *PT Pos Indonesia* especially in the distribution of registration forms and registration documents, payment of tuition fees, distribution of learning materials and other supporting materials. The cost of postal services is relatively cheap and the postal network reaches remote areas of the country. Up until today, this cooperation with *PT Pos Indonesia* is still effective. To facilitate business transaction, *PT Pos Indonesia* has been allocated an office space in the *Public Service Building (Gedung Layanan Public)* at the UT Headquarters in Pondok Cabe.

Bank Rakyat Indonesia

This financial and banking institution assists UT in meeting its operational tasks, especially in financial services. Apart from managing the various financial transactions to support the UT operational activities, this bank also handles salary payment for UT staff. Besides it also handles transactions and payment for tuition fees both for students of the regular program and the in-service teacher education program. Payment for the graduation ceremony by the UT graduates is also done through this bank, which is also known as the "rural" bank, considering the number of branches and its network which reach remote villages.

Local Government

Cooperation with local governments includes those in sub-district, district, and provincial levels. Some of the operational cooperation activities are academic support activities. During the examination period, sub-district Offices of Education help to provide examination locations with use of the local school classrooms. Besides, the students living far from the Regional Office are allowed to take the examination in the approved additional locations in specified districts. This policy can be implemented because of the good cooperation between UT and local governments as part of the effort to facilitate access by students in selecting the examination locations. Apart from examination administration, cooperation with local governments also covers tutorial activities. The face-to-face tutorials require classrooms, and these are made available through cooperation with local governments. Not all regional districts, especially those regions that do not have state universities or the location is far from the state universities, have sufficient tutors. UT has very limited number of tutors, the local governments assist in providing tutors who meet the UT requirements, with a minimum of *Sarjana* degree in relevant fields.

Mass Media

In the instructional process, especially through the use of non-printed mass media, UT cooperates with broadcasting institutions such as *Radio Republik Indonesia* or *RRI* (National Radio Broadcast Service) and *Televisi Republik Indonesia* or *TVRI* (the National Public Television Network). In the beginning, these two broadcasting institutions help UT broadcast its courses. Nowadays the frequency of broadcasting the UT courses by the network has decreased because of the increasing cost and the tight broadcasting schedule. In 1991, UT and *Televisi Pendidikan Indonesia* or *TPI*, a private television network worked together to broadcast courses of the Diploma II In-service Teacher Education

(PGSD) Program. Since 1998, this program has ceased to broadcast because the TPI management made a policy not to broadcast educational programs.

In 2000, UT worked with the private sector to deliver courses through television broadcast through the *Quick Channel* or *Q-Channel* television network. UT has been allocated one hour a day to broadcast its program. Then since 2004, the Department of National Education (*Depdiknas*) has established educational television network called *Televisi Edukasi* (TV-e). UT has also been allocated one hour broadcast per day on this television channel managed by the Centre for Communication Technology (*Pusat Teknologi Komunikasi Pendidikan Depdiknas*).

Cooperation in Recruitment

Most (around 90%) of UT students are working people. Some of these students have been recruited through a cooperation scheme with sponsors. Many UT students are sent and some of them are sponsored by their employers or institutions in which they work. The employers provide sponsorship for the UT students, and they can take the advantage of distance learning because their staff do not have to leave their daily tasks when they take UT courses.

One of UT main partners sponsoring students to study at UT is the Directorate General of Basic and Secondary Education (*Ditjen Dikdasmen*). This government agency has cooperated with UT since the beginning of the 1990s to upgrade the qualifications of in-service elementary school teachers who only had teacher training qualifications at the school level and the number was about two million teachers. By law, they had to be re-trained and upgraded up to two-year university level through the Diploma II In-service Teacher Education (PGSD) Program. This was in line with the government intention to improve the teachers' competencies as part of the effort to respond to advances in science and



technology. Therefore, educators or teachers need to be equipped with more innovative teaching abilities so that they can catch up with the changing needs of the society.

Choosing UT as a working partner is vital because during their studies the students do not have to leave their duties. Beside that UT can accommodate a large number of students, since the distance education system does not require permanent classrooms of its own to deliver its courses. It does not even need permanent campus buildings for lectures like the conventional higher education institution. The number of students taking the In-service Teacher Education Program has constantly increased from year to year.

Other Agencies

Considering the flexibility of the UT distance education system, a lot of state and private agencies are interested in improving the qualifications and competencies of their staff by sending them to take courses at a distance through UT. The government agencies and state-owned companies cooperating with UT include the Department of Cooperative through the Agency for the Resource Development of Cooperative and Small-Medium Business Entrepreneurs, the National Family Planning Coordinating Board, the Ministry of Youth and Sports, *PT Garuda Indonesia*, *PT Merpati Nusantara*, *PT Pos Indonesia*, *Bank BNI*, *Bank BRI*, the Department of Justice (in this case through Tangerang Penitentiary) and the National Library.

Private agencies or companies sending their staff to UT include *PT Krakatau Steel*, *PT Tugu Pratama*, *Yayasan Lembaga Bina Pendidikan Pariwisata*, *Yayasan Tadika Puri* (for DII PGTK program). Until the academic year 2005.2, 26 agencies/institutions allocate scholarship to their staff who study at UT through its 36 (now 37) Regional Offices. The total number is 7,114 students for the regular program. In terms of the number of sponsored students, at the top of the list is *Pondok Pesantren Al Zaitun*, with 5,553 students followed by the Directorate General of Community Education with 306 students, and in the third place is the Directorate of Agricultural Extension of the Department of Agriculture with 291 students. UT it self also offers scholarships for 229 students, followed by *BRI* with 185 students, and *PT Garuda* with 114 students. There are also many other institutions sponsoring their staff to study at UT.

In 1993, the Army Headquarters cooperated with UT to improve the quality of their human resources. The Armed Forces Chief of Staff has made a policy, requiring all the middle and high ranking Army Officers to continue their studies up to *Sarjana* or *Masters* degree levels, and the choice is through studying at UT. As a result of this successful cooperation, further phases of cooperation follow.

Nowadays many the Army Officers from the lowest rank up to the highest one hold S1 (*Sarjana*) degree. With their degrees from UT, some of them manage to continue their studies at the master or doctoral degree levels. So, it is not surprising if there are Army Generals who hold more than one degrees, including degrees from UT.

Cooperation with Foreign Agencies

Distance education originally comes from outside Indonesia. Therefore, cooperation with foreign parties is inevitable. In the beginning, cooperation with foreign parties has been more focused on academic development. The Canadian government, through the Canadian International Development Agency (CIDA) in collaboration with the Open Learning Agency (OLA), helped develop academic and operational activities. OLA support has been focused on giving scholarships to UT staff who wanted to continue their studies in the master and doctoral programs, setting up a system for the distribution of learning materials, and management consultancies.



Signing of cooperation with overseas partners

Entering the 21st century, UT steps forward with its vision "to become one of the centers of excellence in distance higher institution in Asia by 2010, and in the World by 2020". Thanks to this vision, UT has become a very active member of various regional and international organizations as follows.

1. International Council for Open and Distance Education (ICDE). This organization is a coordinating council for distance education institutions, national and regional associations, and organizing body and authority in distance education, virtual learning, and life-long education. Established in 1938, this is the pioneer and oldest international organization in distance education.
2. Indonesian Distance Learning Network (IDLN) is a non-government organization established by the Republic of Indonesia together with UNESCO/UNDP that accommodates institutions and various interests that relate to distance education.
3. SEAMEO Regional Open Learning Centre (SEAMEOLEC). This is one of 15 Regional Centers owned by SEAMEO (South-East Asia Ministers of Education Organization), established in 1997 with the mission to increase regional cooperation among 10 member countries of SEAMEO.
4. Asian Association of Open Universities (AAOU). Established in November 13, 1987 in Bangkok, Thailand and initiated by some prominent Asian Open Universities, this organization gives contribution to educational democratization and works together to share information. AAOU consists of Open Universities in Asian countries, such as India, Indonesia, Japan, Korea, Pakistan, Srilanka, China, and Thailand. In 2008 Rector of UT becomes President of AAOU, and Vice Lector Academic Services as Secretary General of AAOU.
5. Global Mega-University Network (GMUNET) was established in November 7, 2003 with the mission to consolidate and increase the cooperation among the largest open universities with more than 100,000 students and they are called mega-university.



The 19th General Body Meeting and Executive Committee AAOU (Asian Association of Open Universities) at the UT's headquarters Pusat, Pondok Cabe.

Asosiasi Pendidikan Jarak Jauh Indonesia (APJJI)

Asosiasi Pendidikan Jarak Jauh Indonesia (Indonesian Distance Education Profession Association) is "**Professional community from us, by us, and for us**".

Establishment of APJJI

APJJI was established on March 30, 2004 in Jakarta through APJJI declaration by 14 distance education experts and practitioners facilitated by UT Institute of Research. The founder of APJJI are Dr. Anugerah Pekerti, Prof. Dr. Asmawi Zainul, M.Ed., Prof. Dr. M. Atwi Suparman, M.Sc., Dra. Harina Yuhetty,

M.Pd., Hasmonel, SH., M.Hum., Ir. Lamhot Simamora, Drs. Max. Gorky Sembiring, M.Sc., Drs. Mundari Muhada, Dip. TEFL, Once Kurniawan, MM., Dr. Setijadi, MA., Prof. Ir. Soekartawi, Dr. Ir. Tian Belawati, M.Ed., Dr. Th. Widia Soerjaningsih, Prof. Dr. Yusufhadi Miarso, M.Sc. (APJJI declaration, Article 2 in the Statute).

Objective of APJJI Establishment

APJJI is an open and not-for-profit organization for the distance education profession which is based on *Pancasila* (Five Basic Principles of the Republic of Indonesia) and the 1945 Constitution. APJJI provides a forum for experts, practitioners, and observers in distance education to give their optimal contribution to improve the quality of distance education at different sector, levels and types of education (Introduction and Article 1 in the APJJI Statute).

Besides, the APJJI objective is to support research, development and application of distance education. APJJI is aimed at creating a strong alliance to meet the demand for the development of education and training from the learning community through new concepts of an integration of communication technology and instruction in broad applied multidisciplinary fields (Article 7 in the APJJI Statute).

APJJI Vision and Mission

1. Vision: to become the prominent and prestigious association for distance education experts and practitioners.
2. Mission:
 - To serve the community by providing assistance, information, network and opportunities in distance education

- To facilitate the exchange of information on and implementation of distance education
 - To develop distance education strategies for education and training using multimedia approach
 - To conduct research, development and diffusion in distance education
 - To increase the awareness and understanding of the society about distance education
 - To encourage the application of effective methods, technology, and research in distance education
 - To give accreditation to distance education programs and institutions
- (Article 5 in the APJJI Statute)

APJJI Organisational Structure



Figure 1. Organizational Structure of APJJI

APJJI Members

APJJI members come from various segments of the society, especially those who have stakes and interests in distance education :

1. Members consist of distance education experts, practitioners, lecturers, teachers and alumni of distance education institutions and UT.
2. Special Members consist of distance education observers.
3. Honorary Members consist of leaders of distance education institutions and extraordinary citizens appointed for their position, role and contribution to the development of distance education.
4. Members and Special Members must register themselves to the Association.

APJJI Authority

APJJI has the authority to conduct the following activities.

1. Giving distance education awards for the achievement of individual, group, or institution in pioneering, developing, managing and enhancing distance education practice.
2. Giving other forms appreciation other than distance education awards.
3. Assisting study programs and basic and secondary education unit applying distance education system.

Inauguration of APJJI Board of Management at Local Level

The inauguration was carried out at the UT Headquarters or at the Association Secretariat on April 16, 2005. Prof. Dr. M. Atwi Suparman, M.Sc. who is also the Rector of UT, inaugurated the Association' Board Members at the central as well as branch levels, some of them were attending the UT National Coordinating Meeting in 2005.



Declaration of the foundation of APJJI

Finance and Wealth of APJJI

APJJI financial resources come from subscription of members and special members determined by the Association periodically and other unconditional contribution from domestic and foreign donors. Besides, there is also contribution from graduating alumni in the UT Regional Office in Bandung for the branch Association.

General Program of APJJI

The general program of APJJI is the elaboration of the APJJI mission by the Association's Board at the Central as well as Branch levels, focusing on (1) education, (2) research, (3) communication and information dissemination on distance education, (4) accreditation and award, and (5) internal management. The term for the APJJI Board Members is for 3 years either for the Board at the central and for branch levels, which is for the 2003-2008 period. The APJJI Board of Management is functional, contextual, realistic and is congruent to its vision and mission.

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Development of Certification and Accreditation

DEWI PADMO, TEDJO DJATMIKO, AND TIAN BELAWATI

Introduction

The fourth Rector of Universitas Terbuka (UT), Prof. Atwi Suparman was appointed in 2000. Since then, concrete effort and actions to improve the quality of UT services have been taken, including the implementation of the university's Quality Assurance System. The implementation was initiated with the establishment of the Quality Assurance System Committee in October 2001. Its first mandate was to study the draft of the Quality Assurance Framework developed by the Asian Association of Open Universities (AAOU). The team finally adopted the draft AAOU Quality Assurance Framework as reference for the UT Quality Assurance System (UT, 2002), which was subsequently disseminated and introduced to the management and staff in the Headquarters and Regional Offices through the National Coordination Meeting (*Rakornas*) in April 2002.

At the later stage, the UT Quality Assurance Framework was further elaborated in the forms of documented systems, procedures, and work instructions which are necessarily vital to the UT operations. This chapter is not intended to discuss the systems as they have been extensively explored and discussed in another chapter in this book to avoid unnecessary repetition.

External evaluation was conducted by inviting external evaluation agency, the National Agency for Higher Education Accreditation (BAN PT) and two international institutions namely International Council for Open and Distance Education (ICDE) and International Organisation for Standardisation (ISO). In 2005, UT invited ICDE Standards Agency (ISA) to conduct quality assessment which aims to provide international accreditation. ICDE is an institution which is authorized by UNESCO to become a global organisation which accommodates the community of online, flexible and blended learning, including e-learning and distance education. ICDE is a non-profit organisation which was established in 1938 and has been working and dealing with various institutions with different circumstances, conditions and cultural backgrounds. At the moment, the ICDE Headquarters is located in Oslo, Norway with 142 countries becoming its member.

Process of Achieving Accredited Status

Accreditation by the National Agency for Higher Education Accreditation (BAN-PT) is at the level of Study Program. Assessment is focused on the aspect of input, process and output in the administration of the Study Program which includes the curriculum and learning content offered and implemented by the Program.

The accreditation instrument has been developed by BAN-PT, based on the administration of Study Program in the conventional higher education institution which is very different in nature from its counterpart in the distance higher education institution.

UT has taken necessary measures in order to get accredited by BAN-PT since 1996. Bearing in mind that UT is the only distance higher education institution in Indonesia, UT has called on BAN-PT to develop special accreditation instruments that fit the characteristics of distance higher education institution. From 1996 to 1997, BAN-PT in collaboration with the UT Team developed the necessary forms and instruments based on the outlines derived from the principles of distance education administration by setting up ideal assessment indicators for distance education practices. Snowballing discussion which heated up during the process of the development of the accreditation instrument was whether "we set up indicators which ensure a rank of an "A", or "we are going to use the ideal assessment indicators that guide and promote the quality improvement of Study Program administration at UT in the future". Based on the spirit that UT intends to be one of the centres of excellence which is equal to world class distance higher education institutions, it was decided that the instrument developed should use assessment standards containing indicators of ideal quality.

Using the accreditation instrument, UT called on BAN PT to conduct assessment of UT Study Programs for accreditation, and in 1998, all S-1 Study Programs in UT were accredited "B". The result of accreditation shall be valid for five years so that UT should renew and resubmit proposal for accreditation in 2003. However, in line with the development of technology in distance education, the number of Study Programs in UT, and changes in BAN-PT, BAN-PT decided to revise the accreditation instrument for higher education institution implementing distance system developed in 1996-1997 above and the new version was reformulated and completed in the middle of 2005. Therefore, at the time of writing the present paper, UT has completed the process of filling out new accreditation instrument for S-1 Study Programs. The Master and Diploma programs, on the other hand, are now in the process of visitation by the

Assessment Team of BAN-PT for further accreditation process. At the time of writing the present paper, the accreditation instrument is still in development process by the agency.

Institutional Accreditation by ISA

Different from the accreditation conducted by BAN-PT, ISA accreditation was conducted in order to assess the quality of distance education at institutional level, and its evaluation does not emphasise on the aspect of the program's curriculum or contents. Quality Assessment conducted by ISA aims to improve the public confidence that the quality standards of education and the academic title granted by an institution are credible and accountable.



Auditor Team of ISA with UT Rector

Principally, the core of ISA assessment and audit is on student services, as stated by ICDE: *"at the centre of the process is an emphasis on students – in terms of the quality of the information they receive about their programmes of study and the ways in which their learning is facilitated and supported so that they can achieve in practice what they might reasonably expect to achieve"*. In general, the following aspects are stressed.

- Students' recruitment that includes promotion and information dissemination to the community as well as public information on learning support, learning materials, etc.
- Student enrolment which includes tuition fee, contract between individual students with the institution.
- Learning support services which include the requirements for the students to access ICT based services.
- System integration and maintenance and services which include student data and development of communication among students.
- Commitment to educational values, good customer relationship and business practice.
- Learning process and evaluation of students' learning achievement.

Preparation for accreditation submission to ICDE began in 2004 by sending a letter of audit request to the Secretary General of ICDE in Oslo, and ICDE subsequently passed on the UT request to ISA. At its initial step, ISA sent a set of checklist to UT which functions as guidelines for UT to develop its institutional portfolio. Preliminary desk evaluation by the Auditor Team which was appointed by ISA was based on the information collected using the guidelines. Specifically, the checklist main points extracted in the portfolio should include the following issues.

Quality Assurance System

- Is there any document on Quality Assurance System and whom the document is communicated to?
- Is there any special unit/committee in charge of developing, formulating, and implementing the policy on quality assurance?
- How does the unit communicate with executive, senates, faculty, and department/study programs?
- Does every staff in the institution know the policy and what are their contributions?

Learning System

Program and curriculum

- Do all those who are involved in learning management line consider it important to formulate learning objectives?
- Are learning objectives formulated clearly and communicated to students so that they are able to plan their study?
- Is there any learning plan at the university level which ensures the consistency and takes benefit of human resources and cross-unit policy?

Courses and Learning Materials

- Do learning materials meet the requirements for the achievement of learning objectives?
- What kind of learning materials can be accessed by students?
- Is its quality in accordance with the requirements for its contents?
- Are there enough learning materials (modules) stocked for all students?
- What mechanism is available for the distribution of learning materials from the Regional Office to individual students?

- How does the monitoring system work to inform that the students have received their learning package and who is in charge of this?
- Are there any regulations or guidelines to validate courses or learning package, and how often is the guideline revised?
- How often is learning material revised?
- At the beginning of study, does a student get enough information about how to study and the requirements they have to meet in order to take and complete their study?
- What kind of systematic regulation for assisting students to study?

Support System

- Are there any support systems for the students when they make their study plan?
- Who monitors the student's learning progress?
- What kinds of learning support are available for students?
- Are there any well coordinated elements necessary for the provision of student support (such as library, human resources, and ICT access) at the university, faculty, or department/study program?
- Are there any services/support systems available for improving students' motivation or learning ability?
- Do all staff members realise their roles in providing learning support?
- Are there any systems for detecting when a student needs support?
- Does every student receive necessary support in managing their study and to acquire necessary skills to support their study?
- Who is in charge of administration of academic data?
- Are there any systems which accurately monitor and evaluate the student's learning progress?

- Are there any mechanism that regularly provide feedback to student regarding their learning progress/achievement and able to support students so as to make significant progress in their study?

Evaluation of Student Learning Achievement

- Are there any strategies regarding the type and the weight of scoring of learning outcome?
- Do students know from the beginning regarding the scheme, the way and the scope of evaluation on their learning achievement?
- Do students know how they will be assessed and what do they do if they have problems?
- Is there any mechanism to prepare students to undertake every kind of assessment (such as group assessment, online assessment)?

Human Resource Capacity Building and Improvement

Number and qualification

- Does UT have sufficient human resource capacity either qualitatively and quantitatively?
- How are human resources developed? What approach/techniques are used to verify human resource needs?
- Does every staff have their self development planning?
- Is there any mechanism available to share ideas and experience?

Development strategy and utilization

- Do human resource development systems support changes?

- Are there any regular reports on the utilization of the staff development outcomes?
- If any, is the report distributed to the relevant person and is it followed up?
- How is the report used in the monitoring and evaluation process for improving learning systems?

Jobs description and distribution

- Are there any staff grouping with clear job description in terms of learning materials development and distribution, and provision of learning support/assistance?
- Are there any documents which clearly indicate how staff will perform those kinds of responsibility?
- Do the groups have authority to make decision on how to take benefit of the available learning resources?
- Coordinating mechanism at the Department/Study Program, Faculty and University level

Learning support system

- Are there any inter-unit coordinating systems to set up plan and to implement service delivery of learning assistance?
- Are there any inter-unit coordinating systems to regulate, plan, implement learning at the institutional, faculty and department/study program level?
- Are there any inter-unit coordinating systems to determine what kind of learning supports needed by students at the course/subject level or program/institutional level?

Evaluation of student learning achievement

- Are there any inter-unit coordinating systems to plan and implement evaluation of students' achievement?
- Monitoring and evaluation of the overall process and use of feedback

Critical review of the learning system in use

- Are there critical reviews upon the learning systems in use?
- What is needed for reviewing the prevailing learning systems, either at the department/study program, course designers, specific group or individual level?
- Are students' inputs included and considered in improvement efforts?
- How is the result of review used in the subsequent planning process?

Feedback acquisition and its utilisation

- Are there any systems to facilitate periodic evaluation on the effectiveness of learning process and its practical outcomes?
- How often does Learning Material Development Team study the effectiveness of the existing learning approach?
- How is student's feedback collected as part of the efforts to improve the learning approach and systems? How often?

Portfolio along with well arranged data attachments and supporting photographs are sent electronically to ISA in January 2005. The next stage following the desk evaluation was on-site audit which takes the form of site visit to the UT Headquarters and three Regional Offices were selected by the Auditor Team. The selection of the Regional Offices for data verification and auditing purposes was based on the assumption that these represented the common conditions found in most Regional Offices and consideration of time availability.

Based on the criteria above, the Regional Offices of Jakarta, Bogor, and Denpasar were selected. The visit took one week with a very tight agenda which included interviews, discussions, as well as visits to the available facilities and infrastructures such as ICT systems of UT.



*UT received ICDE
Certificate
In September 2005*

Following the entire process mentioned above, the Auditor Team which consisted of two members continued their assessment process in their respective place. ISA announced the result of audit/assessment and submitted the report to UT in August 2005, the conclusion of which is that UT has fulfilled all requirements for the management of distance education.

Therefore, ICDE confers the status of **Internationally Accredited** and **ISA Certificate of Quality**.

The ICDE Certificate of Quality and International Accreditation was conferred on the opening ceremony of "The 19th Asian Association of Open University (AAOU) Annual Conference" in Jakarta on the 15th of September 2005. It was presented by Secretary General of ICDE to the Rector of UT and witnessed by the Vice President of the Republic of Indonesia, Yusuf Kalla, who officially opened the OOAU Conference, and the Minister of National Education, Bambang Sudibyo.

Striving for ISO 9001:2000

UT has been awarded by ICDE the Certificate of Quality and International Accreditation, however, its effort to reach higher standards in quality management system continues. UT continually improves its management system in many aspects of distance education activities. In conducting this, UT is of the opinion that the ISO quality management system is instrumental in nature for setting benchmark of the standardized process control and is believed to bring UT towards becoming a well structured and managed institution. For this purpose, UT has taken all necessary measures to invite the ISO certification agency to assure the quality management of its products, processes and services.

ISO (International Organization for Standardization), which was introduced in Indonesia in 1987, is an international agency that provides Standards for Quality Management System. The system has been initially used in business and service industry; however, it can also be implemented in educational sector – which can be categorized as service industry. The ISO 9000 series, for example, aim to standardise institutional quality assurance that is used by more than

350,000 organisations in more than 150 countries. ISO 9000 is also widely used by higher education institutions, one of which is Benjamin Franklin University – a university implementing distance education systems (Pond, 2002). ISO Standards have been adopted in Indonesia since 1992, and within the period of ten years, more than 1,300 companies in Indonesia have received the certificates of ISO 9001/2 series. When an organisation is granted ISO 9000, they are recognised that they have standards of quality management which are able to provide assurance on the quality of their products and services. Educational services may apply relevant ISO standards in service industry.

In the middle of 2004, UT initiates its efforts for ISO 9001:2000 certification in the management of learning materials distribution. The effort did not only involve the core unit, i.e. the Learning Materials Service Centre but also other related units which also dealt with the process of production and distribution of the learning material packages. Hard work and strong commitment contributed by all personnel concerned have lead to the recognition that the management system of the learning material distribution has been consistently implemented and met the ISO 9001:2000 standards. This recognition through ISO 9001:2000 certification was finally awarded in March 2006. Improvement in the quality of management in UT did not stand still following this recognition; the institution keeps improving the quality of its management system in different areas of UT core business processes. In 2006, UT strived to get certification of ISO 2001:2000 for its academic development, which includes the development of printed and non-print materials and the development of examination systems, and distance learning services of the Regional Offices.

Road to ISO 9001:2000 Learning Materials Services

In 2004, the effort related to ISO 9001:2000 certification was focused on the process of learning material services – a key activity which is the main focus of UT. This effort is a process in maintaining the quality of management in the distribution of learning materials so that it can ensure that the materials will be received by the students in timely manner. This effort placed the Learning Material Service Centre (*Puslaba*) in the centre of driving the activities. Although the effort to achieve the recognition through the award of ISO 9001:2000 was focused on the Centre, the improvement was not only made in the Centre but also in related units which contributed to supporting the management process in the Centre. Improvement in management process, therefore, also occurred in the related units.

Although within the last five years (2001-2005), improvement of management system in all related aspects has been a continual process, the process of achieving the ISO 9001:2000, especially for the Learning Material Service Centre, was tedious and took a lot of commitment and seriousness of purpose. This was due to the requirements for changes and adaptation into the quality management system that complies to the ISO 9001:2000 standards. The process of certification requires coordinated and well organised preparation among the units involved and the key unit/organisation. Certification process was conducted by internationally and nationally accredited organisations. The key steps in the certification process are as follows.

- Setting up institutional commitments in implementing quality management system.
- Implementation of quality management system based on the ISO 9001:2000 standards in the targeted units of the organisation.
- Appointment of accredited organisation for certification.

- Assessment or audit of all aspects of management and its implementation in all related units. Audit is conducted internally and externally by accredited, independent certification body.
- Conferring ISO 9001:2000 certificate. Certificate is conferred based on the result of external audit which shows that quality management system has met all the ISO 9001:2000 standards and have been implemented in accordance with the requirements set forth for quality management system. The certificate is valid for 3 (three) years.
- *Surveillance Audit* (conducted periodically every six months) is meant to evaluate the effectiveness of ISO 9001: 2000 implementation and the occurring changes.

Preparation and attainment process of ISO 9001:2000 certification for the learning materials services was made from April 2005 to February 2006. The preparation was made in some stages that include:

1. Establishment of Working Committee for Attaining ISO 9001:2000 Certificate for the Learning Material Service Centre, stipulated in the Rector Letter of Decision.
2. Training and socialization of SNI/ISO 9001:2000 quality management system. Training and socialisation is targeted to top Management in order to establish awareness and commitment to quality, and to staff in order to develop an understanding of the requirements for quality management of ISO 9001:2000.
3. Revision of Procedures in the following business processes.
 - Quality Manual for the Learning Materials Service Centre.
 - Quota and Reproduction of Learning Materials.
 - Receiving and Stacking of Learning Materials.
 - Assembling of Learning Materials.
 - Distribution Service of Learning Materials.

- Consignment of Learning Materials.
 - Control of Learning Materials.
 - Verification of the Reproduction of Printed and Non-Printed Learning Materials.
 - Procurement and Maintenance of Facilities/Infrastructure.
 - Security of Data and Computer Application.
 - Personnel Recruitment.
 - Staff Training.
 - Report Writing of Quality Assurance Implementation.
 - Evaluation of Quality Assurance Implementation and Management Review Meeting.
 - Internal Audit.
 - External Audit.
4. Documentation, i.e., preparation of supporting documents which include:
 - Records
 - Forms
 - Table of Specification
 - Work Instructions
 5. Socialization and implementation of the procedures in order to improve understanding for staff and implementation of the procedures in accordance with ISO 9001:2000 requirements.
 6. Revision of procedures and corrective action based on input from implementation.
 7. External Audit conducted by an internationally accredited certification body, namely SAI Global.
 8. Management Review Meeting, conducted to discuss and evaluate the implementation of the quality management system, problems and constraints emerging from the implementation of the system, survey results on customer

satisfaction, and corrective action and prevention. Management Review Meetings were conducted on the 24th of November 2005 and 24th of January 2005.

9. Revision of Procedures and corrective action based on the results of Internal Audit.
10. Pre-audit was conducted certification body on the 24th of September 2005.
11. Revision of Procedures and corrective action based on the pre-audit findings.
12. External audit for certification, conducted on the 8th of December 2005.
13. Revision of Procedures and corrective action based on the results of External Audit.
14. Verification of revision and corrective action of the External Audit findings, conducted on the 24th of February 2006.

The process of achieving the ISO 9001:2000 in Learning Materials Services did not stop when the certificate has been awarded in March 2006. Achievement of the certificate is only the beginning of continual improvement in the management of learning material services. This can be done through the mandatory *Surveillance Audit* which must be conducted every six months since the certificate of ISO 9001:2000 for Learning Material Services was awarded.

Road to ISO 9001:2000 in Academic Aspects: Development of Learning Materials and Examination

The effort to attain ISO 9001:2000 for Learning Material Services was only the beginning. In 2006, UT planned to attain the standards of ISO 9001:2000 for

the management of academic development systems that include learning materials and examination, ranging from preparation of dummy/master of printed and non-printed learning materials and the process of test material preparation, processing the examination results, and announcement of the results to students. It also includes the system management for administering student services in the Regional Offices (*UPBJJ UT*). The efforts to attain recognition on quality management, especially in those services, aim to provide quality services for all UT students.

Implementation of quality assurance system particularly in academic aspects, especially preparation of learning and examination materials, is mandatory as such systems are capable of helping UT in providing quality services in the learning process. Therefore, the preparation of the student learning process by UT staff can be conducted with the highest quality standards so that it can give significant impact on the quality improvement of students learning.

Preparation for attaining ISO 9001:2000 certificate in the development of learning materials and examination materials has been made since the end of 2005, by the Preparation Team that was established under the Rector Decision Number: 940/J31/ KEP/2005 of 23 December 2005. The Team was under coordination of the Head of the Quality Assurance Centre (*Pusat Jaminan Kualitas* or *Pusmintas*), chaired by the Chairman of the Institute for the Development of Learning Materials, Examination, and Information System (LPBAUSI). The Team member represented the relevant units such as Faculties, the Printed Learning Material Development Centre (PPBAC), the Non-Printed Learning Material Development Centre (PPBANC), Examination Centre, and General Affairs and Finance Bureau (BAUK), which began working intensively in early 2006. After working for six months, due to the extension of academic scope, the Team was amended through the Letter of Decision of the Rector

Number 2681/J31/KEP/2006 of 26 June 2006, and more membership and chairmanship were added. The Team then consisted of Steering Committee with Rector of UT as Chairman and Vice Rectors, Deans, Chairmen of Institutes and Heads of Bureaus as Members of the Steering Committee. Meanwhile, for the Working Committee that represented the management included the Chairman of LPBAUSI and the Chairman of the Quality Assurance Centre. The Executive Committee was chaired by Vice Rector I and the Chairman of LPBAUSI as the Vice Chairman. The scope of academic area targeted in the quality management system covers the following activities:

Development of Printed and Non-printed Learning Materials

- Writing the learning materials.
- Reviewing the content.
- Submitting the manuscript of printed learning materials to PPBAC/PPBANC.
- Processing, typing//*lay-out* and graphic) designing of the materials (PPBAC/PPBANC), Editing and review process.
- Final preparation of the master (dummy) of printed learning materials (PPBAC/PPBANC).



Preparation for distributing learning materials

Development of Examination Materials

- Writing test materials/items (Faculty).
- Review of test items (Faculty).
- Submission of test items to Examination Centre (*Pusjian*) by Faculty.
- Processing, typing/lay-out, assembling examination papers by Examination Centre (*Pusjian*).
- Finalisation of master of examination paper for printing by Examination Centre (*Pusjian*).

The first step taken by the Team was to review and revise the working manual and procedures written in 2000. Revision of the procedures was focused on reviewing the procedures aiming at efficiency and improvement of formats in

accordance with ISO 9001:2000 standards. Overall, the preparation for attaining ISO 9001:2000 includes the activities with the timeframes as in Table 1.

Table 1. Time Frame and Activities of Preparation for Attaining ISO 9001:2000

ACTIVITY	TIMEFRAME
Reviewing QA manual and procedures related to the development of learning materials and test materials.	March 2006
Socialization	March 2006
Documentation: quality policy, quality target, mapping business process	March 2006
Facility, infrastructure, and working environment	February 2006
Reorganisation of human resources: drafting HR qualification; recruitment of course writers; reviewers of printed, non-printed learning materials, examination papers, examination marking.	February 2006
Preparation of activity records in accordance with the procedures	April 2006
Internal audit I	June 2006
Corrective action based on of the internal audit findings	June 2006
Verification of the corrective action	June 2006
Internal audit II	August 2006
Corrective action based on the internal audit findings	August 2006
Verification of the corrective action	August 2006
External pre-assessment	September 2006
Corrective action based on the external pre-assessment findings	September 2006
Verification of the corrective action	September 2006
External certification audit	October/November 2006

The road to the attainment of ISO 9001:2000 in academic aspect has not easy although all of the procedures in the relevant aspects have been developed since 2001. Enthusiasm and interests to achieve the objective has been consistently and continuously maintained by all level of leadership and implementing units through hard work and high spirit for improvement to achieve better quality management system. At last the certificate was awarded in September 2007.

Regional Office Striving Towards ISO 9001:2000

One of the key success factors of UT in serving students and improving UT image rests in the hands of the Regional Office. UT leadership and all the staff both in the Regional Office and the UT Headquarters are fully aware of this situation, and it is this awareness that encourages UT to empower and encourage Regional Offices to attain ISO 9001:2000 certification. Attainment of ISO 9001:2000 standards by the Regional Office, the objective of which is to ensure that they will provide better services to students, has been a tedious and difficult process to accomplish.

Preparation for ISO 9001:2000 certification of Regional Offices was initiated with the establishment of a Team for Attaining ISO 9001:2000 for the Regional Office, stipulated in the Rector Letter of Decision. Eleven Regional Offices were nominated to attain ISO 9001:2000 certification in 2007, including the Regional Offices of Jakarta, Bogor, Bandung, Semarang, Purwokerto, Yogyakarta, Surabaya, Malang, Palembang, Padang, and Pontianak. The Team preparing the attainment of ISO 9001:2000 certification for the Regional Office is established by the Rector Letter of Decision Number 941/J31/KEP/2005 of 23 December 2005. The Team, under coordination of the Chairman of the Quality Assurance Centre, was chaired by Vice Rector III, with members representing the relevant operational units, namely the Regional Office, LPBAUSI, BAAPM, Examination Centre, Learning Materials Service Centre, and BAUK. The Team started working intensively in early 2006. Six months later, due to the revision regarding the members, through the Rector Letter of Decision Number 2680/J31/KEP/2006 of 26 June 2006, the Team was revised and its Chairmanships and Memberships were broadened. The new Team consisted of Steering Committee with the Rector as Chairman and Vice Rectors, Deans, Head

of Bureaus, and Heads of Institutes. Meanwhile, for the Working Committee, Vice Rector III and the Head of Quality Assurance Centre served as Management Representative. Implementation of the program was chaired by Vice Rector III with the Head of Learning Materials Service Centre served as the Vice Chairman.

Based on the activities conducted by Regional Offices (UPBJJ), some areas of activities were determined in the quality management system.

- Socialisation, publication, and marketing.
- Students' recruitment and registration.
- Delivery of learning materials to students.
- Implementation of face-to-face tutorial (other types of tutorials are provided by Faculty).
- Implementation of practice (internship) and practicum
- Examination administration (preparation, implementation, delivery/consignment of the results to Examination Centre in UT Headquarters).
- Marking of examination papers (essay-type tests), practicum and internship report, and final assignment.
- Implementation of cooperation (especially with local government).
- Development of alumni and student activities.
- Handling complaints of students and other service users.
- Finance and administration systems, including sales of learning materials and other UT attributes.
- Personnel development and supervision.
- Utilization of facilities, infrastructures and ICT.
- Graduation ceremony and conferring of certificate/diploma.

With the number of Regional Offices to be prepared for ISO 9001:2000 certification, and bearing in mind the comprehensive scope of activities determined in the quality management system, the Team for Attaining ISO

9001:2000 for Regional Office distributed the responsibilities to individual Team to be in charge of the respective Regional Office and each area of activities of the Regional Office as stipulated in the Rector Letter of Decision.

The activities conducted by the Team for Attainment of ISO 9001:2000 for Regional Office include the followings.

1. Documentation, that covers:
 - Identification of QA manuals and procedures relevant to the Regional Office.
 - Collection of relevant inputs from 11 Regional Offices regarding activities and procedures used by the Regional Office, information about human resources, and data on facilities/infrastructure in the Regional Office.
2. Sharing common perception on SNI/ISO 9001:2000 standards.
3. Identification of manuals and procedures for quality management system of the Regional Office.
4. Reviewing manuals and procedures on quality management system for the Regional Office.
5. Drafting procedures for quality management system of Regional Office.
6. Drafting Quality Manual for Regional Office.
7. Socialization and try-out of quality management system for 11 Regional Offices.
8. Preparing supporting documents for quality management system of Regional Office (activity records in accordance with the procedures, forms and work instructions).
9. Revising manuals and procedures based on relevant input from socialization and try-out.
10. Socialization and getting inputs from the National Coordination Meeting.
11. Monitoring the implementation of manuals and procedures of quality management system in Regional Office.
12. Internal audit

13. Corrective action of internal audit findings.
14. Verification of corrective action of internal audit findings.
15. Management Review Meeting
16. External pre-assessment/pre-audit
17. Corrective action of pre-assessment findings
18. Verification of corrective action of pre-assessment findings.
19. External certification audit
20. Corrective action of external certification findings.
21. Drafting budget plan of activities for attaining ISO 9001:2000

Regional Office

The steps to attain ISO 9001:2000 for the Regional Office have been a long journey as the continual improvement process to be conducted in 11 Regional Offices required effective coordination and deeper concentration due to their scattered locations. This challenge, of course, would not prevent the decisive effort to maintain quality and attain the recognition on quality management standards from a credible certification body. In 2007, 11 Regional Offices of UT have been certified with ISO 9001:2000.

In the following years, further effort is done to improve the quality management system in more areas of UT main business processes. Since the beginning of 2008, ISO 9001:2000 certificate has been awarded in the area of academic administration services as part of the effort to assure the quality of registration and academic services to students. Preparation for ISO 9001:2000 certification in 2008 is underway for the management and partnership and promotion in UT Headquarters and for distance learning services in 14 Regional Offices, i.e., (1) Medan, (2) Pangkalpinang, (3) Jambi, (4) Bengkulu, (5) Bandar Lampung, (6) Serang, (7) Surakarta, (8) Denpasar, (9) Palu, (10) Kendari, (11) Manado, (12) Gorontalo, (13) Makassar, and (14) Jember. Considering the

importance of improving the quality of occupational health and safety, intensive preparation is also conducted for OHSAS 18000:2007 in 2008. Financial management is also given a serious attention with the preparation for audit to secure a government statement of *Wajar Tanpa Pengecualian*, meaning that UT has a sound financial management system.

For the year 2009, it is expected that the remaining 12 Regional Offices will be awarded ISO 9001:2000, i.e., (1) Banda Aceh, (2) Pekanbaru, (3) Mataram, (4) Palangkaraya, (5) Banjarmasin, (6) Samarinda, (7) Kupang, (8) Ambon, (9) Ternate, (10) Jayapura, (11) Batam, and (12) Majene. Step-wise preparation is also being done to improve the quality of information technology services through implementing the ISO 20000 *Information Technology Service Management (ITSM)* (Zuhairi & Nugraheni, 2008).

Conclusion

UT effort to attain international recognition through certification of quality management system in distance education and the implementation of quality management standards is not an end in itself, but instead it is an instrument for structuring the management system and a comprehensive approach to improving the quality of performance. Through the assessment parameter determined by an internationally accrediting organisation, the management process implemented by UT can be triggered and directed to achieve international standards. Therefore, UT can achieve its vision to be "one of the centres of excellence among distance higher education institutions in Asia by 2010 and in the world by 2020". These efforts will never yield significant achievement unless all members of the university community are committed to support these efforts for continual quality improvement.

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Development of Learning Material Services

ANAK AGUNG M. SASTRAWAN PUTRA

Introduction

This article is the revised edition of an article entitled "Development in the Distribution of Learning Materials" by the same author, in *Universitas Terbuka: Dulu, Kini dan Esok*. Jakarta, (2004), Wahyono, et al. (Eds). As there have been significant changes in the area of learning materials services, this revised edition is needed to appear in this book.

In distance higher education system, such as applied at *Universitas Terbuka* (UT), learning materials (printed and recorded) are one of the major components in the teaching learning, apart from other components such as, registration, tutorial/practice/practicum, and examination.

UT students have to learn more independently from the provided self-instructional learning materials. The learning materials are to be received by the

students according to the schedule. The timeliness of receiving the materials by the students will ascertain the success of the UT students in their studies.

The timeline for the distance students to receive the learning materials must be carefully calculated to allow students to have enough time to study so that the students will have better learning achievement.

The main constraint in the distribution of the learning materials is the students' address, which is separately located in all over Indonesia. The distribution of the learning materials must involve the use of different kinds of transportations, such as by land, sea, and air. Not all means of transportation can be relied on in sending the learning materials quickly to reach each of the students' addresses. Furthermore, there are a large number of learning materials and other supporting materials that have to be managed (accepted and sent) carefully. Confronted with such constraints and challenges UT has always attempted continually improve the learning materials distribution system and try to implement the best and most efficient system in order to ensure that the students can get the learning materials on time and in accordance with the courses they take.

Since it was founded in September 1984, the UT learning materials distribution system has gone through several changes or improvement. These changes were in accordance with meeting the changing requirements of the UT operational system.

Fluctuating Period (1984-1989)

The period of 1984-1989 was highly dynamic for UT, because its operational system has underwent a lot of changes, and so did the learning materials distribution system. The first five year period of UT operation was critical for the future development of UT. That period constituted a period of

seeking the right ideal format for the UT operational system. During this period of time, there were two changes in student registration system that directly related to the learning materials distribution system. Even it can be said that one of the important considerations in underlying the changes in the student registration system was the learning materials distribution.

In the first year of UT operation, in 1984/1985, there was almost no constraint in distributing the learning materials to the students. Student registration was done once a year. The number of the student accepted in the first year was 54.035 students out of approximately 260.000 applicants. The courses were offered in semester learning package for four Study Programs, i.e. Economics and Development Study, Public Administration, Business Administration, and Applied Statistics. Every semester, each of the Study Programs offered five courses that were divided into two learning packages. The first learning package contained three general courses (taken by all Study Programs), and the second learning package contained two courses of the respective field of study. Thus, during the first year of operation, UT offered only five different learning material packages per semester, consisting of one general learning package and four specific learning packages for the Study Programs. The total number of courses offered in the first year was eighteen courses. The distribution of the learning material packages to the students was carried out in two stages, i.e. in the beginning of the semester for the first package and in the middle of semester for the second package.

The state-owned postal service *Perum Pos dan Giro* (now *PT Pos Indonesia*) has been the first institution cooperating with UT in the distribution of the learning materials. The learning materials are assembled and packed in the UT Head Office and distributed to selected Post Offices, in accordance with the number of students registered in each region. In the first year, UT conducted selection process for new students, so that UT have the information to provide

the exact number of the learning materials for every Regional Office. The students can get the learning materials at the appointed post office after paying the fees for tuition and learning materials. Students can then register themselves to the respective Regional Office. After registering, they can establish a study group with fellow students. Establishing study groups can be easily done because students have similar courses taken every semester in each Study Program.

In the second year, 1985/1986, the number of learning materials package provided increased along with the increase in the number of semesters in operation and the offer of new study programs. The number of Study Programs grew from four in the first year to 26 in the second year (14 of them were regular programs and 12 were teacher certificate programs). The increasing number of study programs resulted in more difficulties in distributing the learning materials package to the students. Because the number and volume of the learning materials increased, the appointed Post Offices needed larger spaces for storage of the learning materials. The Post Office started to experience difficulties in providing larger warehouses for the UT learning materials.

Finally, in the third year, 1986/1987, UT decided to change the learning materials distribution system, by changing the registration system called "*Sistem Registrasi Baru*" (New Registration System). In the new registration system, the course offerings were no longer based on the semester package; instead, all courses could be registered by the students in any semester offered. Registration of new students was done not on annual basis but every semester. The academic cycle was changed from the semester basis (every six months) to the trimester basis (every four months), so that UT could register new students three times a year, and conduct examination also three times a year.

In accordance with the open characteristic of UT, the students are free to decide and choose their courses each semester (with a maximum of 10 courses)

in line with the maximum available examination schedule every semester. A fundamental change related to the learning materials is that the students are not obliged to buy the learning materials. The students can buy the learning materials in groups, so that the tuition fees become relatively cheaper.

The change in the course offering system resulted in fundamental change in the learning materials distribution system. The students no longer had to pick the learning materials in the Post Offices, and instead the UT Head Office directly sent the learning materials to the students' addresses according to the students' order requests. UT has maintained cooperation with the Post Office in the delivery of the learning materials to the students.

The students interested in buying the learning materials were requested to make a purchase order by filling out the prescribed column in the registration form. Payment for the purchase of the learning materials could be done in the Post Office by special postal clearing for the learning materials which was separated from the postal clearing for tuition fee payment. The receipts of the postal clearing for the learning materials payment together with the registration form were sent to the UT Headquarters for further processing. Once the registration form was received and processed in the UT Headquarters, the learning materials were then sent out to the students' individual addresses in according to their purchase orders. With this new distribution system, there was no longer piling of the learning materials in the Post Offices as happened in the previous year. However, this did not mean that the problem was totally overcome, as there appeared new problems beyond prediction.

The fundamental change of the operations system demanded readiness of computer hardware and software and the human resources, including the students' readiness in adapting to this new system. In the new operations system, all registration forms and student identification number were modified according to the new requirements for the student data computerization. The

registration forms filled out by the students were processed using the computer scanning system centrally managed by the Registration Division. In this new processing system, for those students requesting purchase order of the learning materials, UT would issue the learning materials package label containing student identification number, address, and the ordered learning materials. Based on this learning materials label, the Distribution Center would prepare and pack the learning materials and send them out to the students' individual addresses in all over islands of Indonesia via postal service.

With the support of the Post Office, which has branch offices in almost all sub-districts (*Kecamatan*) in Indonesia, UT was optimistic that the distribution system could run well. In fact, the distribution of the learning materials did not run smoothly as expected. The complexity of the new operations system with a very short time of preparation along with the limited availability of computer facilities and human resource abilities owned by UT during that time caused the new system not to operate well as already planned. The short period of time for preparation also had impact on the lack of socialization of the new system to the Regional Offices and particularly to the students. Many students were not yet ready to adapt to the new computer-based operations system. This could be seen from the incidence of the students' mistakes when they filled out the registration forms. Filling the scan able registration form using the 2B type pencils was a new experience to many of the students, so that there were a lot of incidences of mistakes in filling out the registration form. As the result, the students' registration data could not be processed quickly. The lack of readiness on the part of UT in anticipating the students' incidences of mistakes, in an unimagined number, had consequences on the timeliness of the delivery of the learning materials to the students.

Some constraints in the delivery of the learning materials to the students were also due to the incomplete addresses of the students and the limited ability

of the Post Office in delivering the materials. A significant amount of learning materials was returned to the UT Headquarters by the Post Office because the students' addresses were not known or unclear. This could happen not only because the addresses were incomplete but also the addresses could not be reached by the Post Office. Especially for the sub district, village or isolated areas, the learning materials could not be directly delivered to the students' addresses, because the postal officer could not carry the learning materials package with more than 10 kilograms in weight using bicycle. The students had to collect the learning materials packaged on their own directly to the Post Office after receiving a notice letter from the Post Office. For many UT students, coming to the nearest Post Office in certain parts of Indonesia was neither easy nor cheap endeavor, as the students had to spend extra time and allocate extra budget to get the learning materials from the Post Office.

The UT failure in implementing the new operations system resulted in delays for many students to get their learning materials and some of them did not receive the learning materials even until the semester examination was administered. As the result, UT received 18,000 letters of complaints from the students for not receiving the learning materials, and hundreds of students came directly to the UT Head Office everyday to put forth their complaints. Some students sent open letters to the mass media expressing their dissatisfaction of UT services. This condition caught the attention of some members of Indonesian Legislative Assembly, so that the UT top management was invited to give clarification.

The UT inability to handle students' complaints quickly and improve its services effectively had impact on the decreasing number of new student registration in the next semester. The total number of new student registration in the 1987-1 semester decreased drastically from 46,910 students in 1985 to 16,135 students. This total number of student registration was the lowest ever

during the UT life as an open university institution. If this condition happened continuously, it would seriously affect UT sustainability in the future.

Beginning the registration period of 1987-2 (the academic year of 1987/1988), the UT top management decided to change the UT operations system, including change in the learning materials distribution system through the newly improved registration system called "*sistem registrasi baru yang disempurnakan*". The registration and examination period became twice a year as implemented in the previous system. The change in the distribution system was that the learning materials no longer directly sent to individual students' addresses. The UT Headquarters empowered Regional Offices (UPBJJ) to play greater roles in the distribution of the learning materials sent to the Regional Offices. The students were not obliged to buy the learning materials. The students wishing to buy the learning materials could get the materials in two ways. They could directly buy the course materials in Regional Offices, or for those living far away from the Regional Offices, they can order the materials through the Post Office. Ordering the course materials through the Post Office could be done by filling the order form and paying the course materials fees using special postal clearing for purchasing the materials. The form and postal clearing had to be sent to the respective Regional Office, which would then send the course materials to the student's address. However, this ordering system by Post Office created a new problem for the Regional Offices, because they needed additional budget to send the course materials to the students. Finally, many students living far away from Regional Offices preferred to buy the course materials in groups and they sent one of them to come to the Regional Office or the UT Headquarters to get the course materials.

The consequence of the change was that the UT Headquarters had to provide all the course materials in each of the Regional Offices in accordance with the number of the students catered by the Regional Office. The Regional

Offices had to have spaces for the warehouse of the course materials and applied a new administration and warehousing system in order to give the best services to the students. In this way, UT improved the learning materials distribution services to the students. This improved system was reflected in the low frequency of complaints and the gradual increase in the number of student registration.

However, the main constraint appeared to be in ensuring that there was enough supply of the course materials in every Regional Office. The UT Headquarters had difficulties in predicting the students' need of the course materials in every Regional Office precisely, because the students were not obliged to buy the course materials. However, the UT Headquarters had to provide enough supply of the course materials in every Regional Office as many as the total number of registering students in every Study Program. This often caused problems in the piling up of stock for certain courses, while some other courses may have run out of stock. The UT learning materials were used not only by the UT students but also many other university students. Besides, there was a tendency that students would register and buy the course materials towards the end of the closing date of registration in each semester, so that the Regional Offices ran out of the course materials during that period of time. It took about two to three weeks to order the course materials from UT Headquarters and get the materials sent to the Regional Office on the condition that there were stock of learning materials available in the Head Office Distribution Centre. This time constraint made the time shorter for the students to study the materials.

Consolidation Period (1990-1999)

During the period of 1990-1999, no significant change took place in the UT learning materials distribution system. The system was continually refurbished in order to perform better with gradual changes. The flexibility of the system was developed in terms of variations in order to accommodate the needs of the Program for In-service Primary Teacher Education students. This period was also marked with the drastically increasing number of students (approximately 400,000 students in 1996/1997), as the effect of the opening of the Diploma II Program for In-service Primary School Teachers (PGSD) beginning in the academic year 1990/1991 and of other new Study Programs as well.

Learning from the previous experiences, particularly in managing the registration and distribution of the course materials, the Diploma II PGSD Program designed differently from the regular programs. In the PGSD Program, the courses offered in a semester learning package, initially it offered for 6 semesters, and then shortened into 5 semesters. Every student of the PGSD Program got the course material, because the course material was included in the tuition fee.

However, for the students of PGSD Program Project sponsored by the Directorate General of Primary and Secondary Education (*Ditjen Dikdasmen*), they had to pass the course materials on to the students registering in the following year. For the first cohort of students of the Project, the learning materials package was intended for one student. However, for the following student cohorts, the learning materials package was intended for two to three students, so that not every student could get the complete learning materials package. The remaining course materials could then be obtained from the students of previous cohorts who had passed the examination. This mechanism was difficult to implement. In terms of operations, the UT had difficulties in controlling the distribution of the course materials for the sponsored students,

because the printing and delivery of the course materials were administered by *Ditjen Dikdasmen* under the Division of In-service Primary Teacher Upgrading (PGSD) Project. It was found that there were a lot of PGSD students who did not get the course materials so that this affected the student learning achievement.

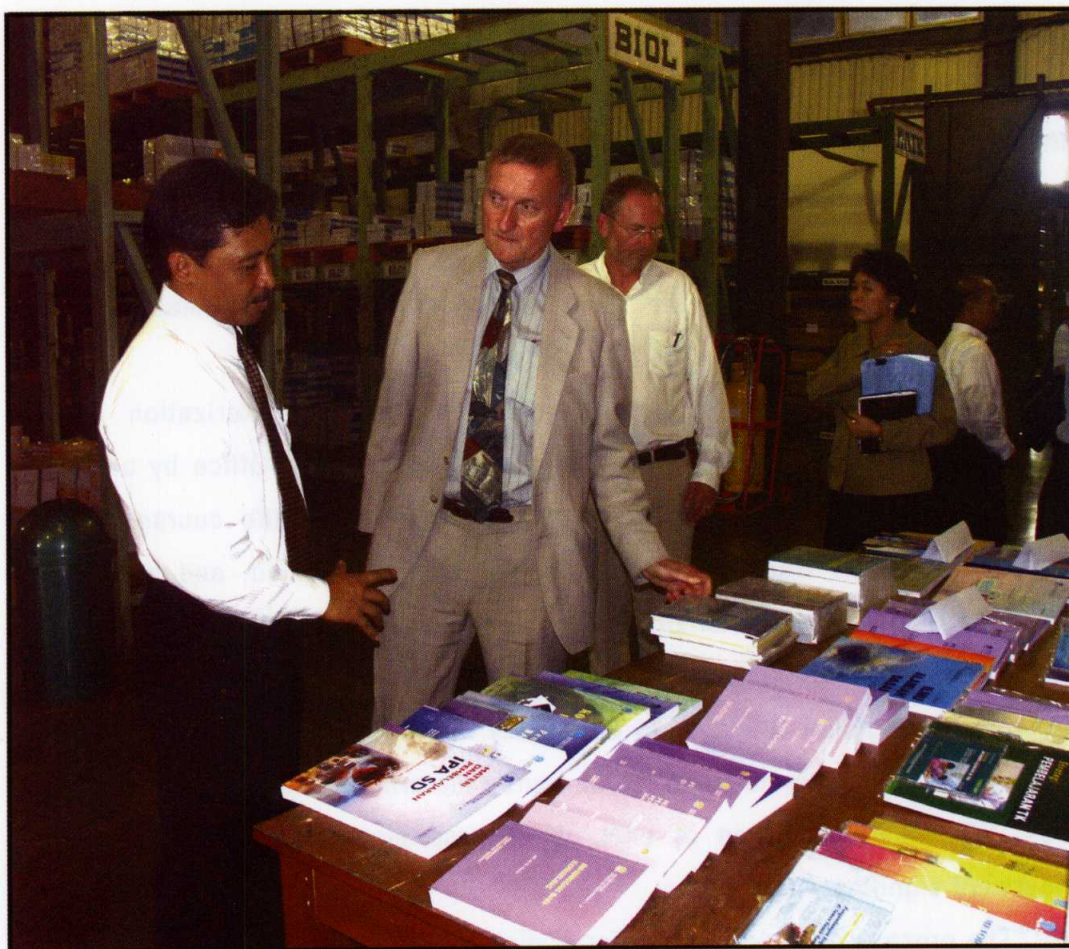
With the implementation of the Law on Regional Autonomy and Financial Balance between the Central and Regional Government, taking into effect in 1999, the funding for students in the Diploma II PGSD Program was no longer allocated through the Office of *Ditjen Dikdasmen*, but instead by the District/Municipal and Provincial government. Since then, the printing and distribution of the course materials for the students of PGSD Program Project were administered by UT, like regular self-financing UT students. Every student obtained a set of learning materials package before the beginning of every semester.

Consolidation in the distribution of the course materials was continuously conducted, and the effort was to develop computer application beginning in 1998 for the regular program, and in 2000 for the PGSD Program.

The Period of Using Computer Application (2000-2005)

The period of 2000–2004 was marked with the use of computer application in managing the distribution of the course material not only in UT Headquarters but also in Regional Offices. The use of computer application became unavoidable need for UT because the significantly increasing number of course materials to be distributed. More than 1000 different kinds of course materials and their academic supplements, or approximately one million sets of course materials were to be distributed to students every year. Without accurate data, there would be a lot of constraints in the procurement and distribution of the

course materials. The provision of a large quantity of the course materials in the UT Headquarters and Regional Offices was no easy task to do, because of the financial limitation in procurement and the limited warehousing capacity in Regional Offices. Therefore, the course material management in UT Headquarters and Regional Offices became crucial so that the prediction for the need of course materials could be conducted more accurately.



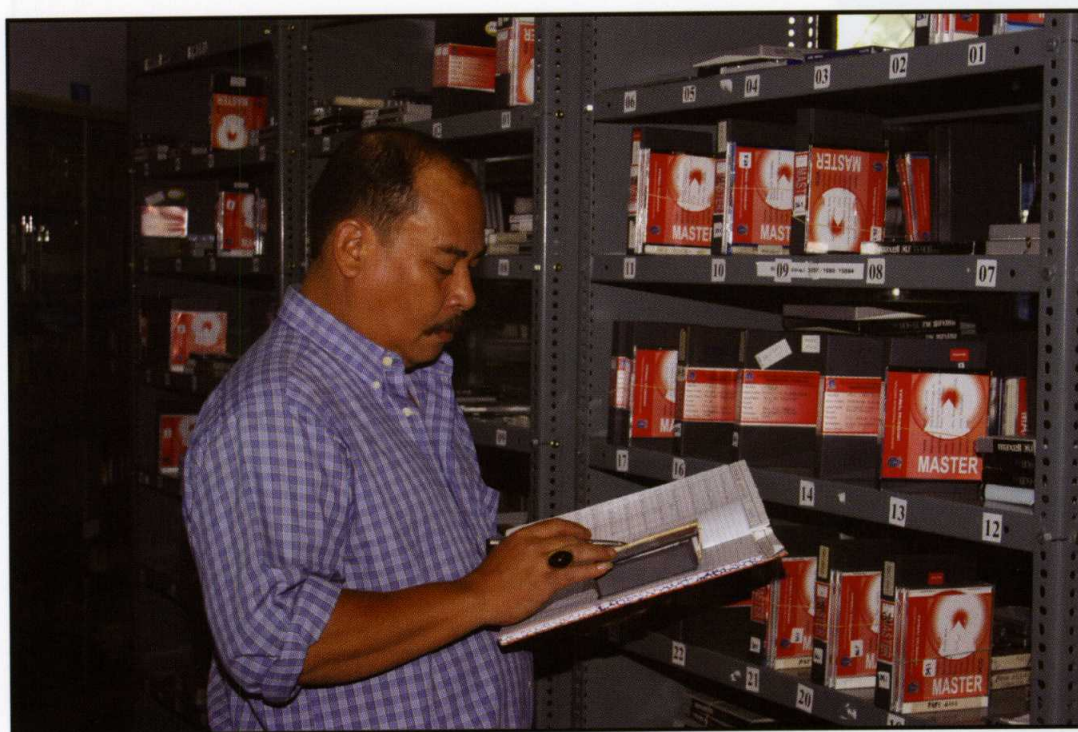
Visit by the ICDE Auditors in Learning Materials Service Centre (Puslaba)

Good management required regular calculation and stocktaking of the course materials, and the transfer of course material payment from Regional Office to the Headquarters. Irregular stocktaking and transfer of payment had effect on the effective distribution of the learning materials to Regional Offices. The UT Head Office, in this case the Administration and Finance Bureau (BAUK) that held the authority in controlling the course material stocks and financial management in Regional Offices, would not fulfill the order of the course materials in Regional Offices if they had was enough stock. This decision was based on the stock report and the transfer of the sales payment. One of the efforts to improve the management of the course materials was by developing computer application system for stock management and reporting. To ensure effective management of the course materials in Head Office and Regional Offices, computerization in the management of the learning materials was urgently needed.

Starting from 1998, the preparation for the computerization in the management of the course materials began in the UT Head Office by using the local area network (LAN). In 2000, computerization for the course material management in UT Head Office had been effectively applied, and preparation continued for the computerization of the course materials management in Regional Offices. In 2001, computerization in the management of regular course materials in Regional Offices was effectively in place, and it continued with the computerization in the management of course materials for the PGSD program in 2002. With the application of LAN, the course materials distribution system underwent significant changes.

The process of the course material distribution started with determining the total printing volumes of the course materials. The meeting of determining the printing quota of the course materials was led by Vice Rector III (Operational Affairs), involving the Faculty, Academic Administration Bureau, Administration

and Finance Bureau, Publishing Center, Multimedia Production Center, Computer Center, and Distribution Center. Determining the printing quota for each course was conducted by means of predicting the need of the course materials in the following semester. The prediction was based on the data of student registration in the previous semester, and the sales data of learning materials in Regional Offices, and the number of the course material in the Distribution Center and the remaining stock of learning materials in Regional Offices. The meeting was carried out twice a year, a month before the following registration period started. The Faculty, under the coordination of Vice Rector I (Academic Affairs) who is responsible for the development of course materials, had to ascertain that the course materials which would be offered to the students in the following semester were ready to print.



Above: Preparation of master for the non-printed learning materials.

The Printed Course Material Production Center (PPBAC) develops the print master of the course materials and the Multi Media Production Center (P2M2) prepares the non-printed master of the course materials. BAUK is responsible for the printing of the course materials, using subcontracted companies. It took two to three weeks to print the course materials since the letter of printing order was issued. Then the printing results were handed over to the Distribution Center for storage and preparation for distribution. With the regular meeting for determining of the printing quota and involving all related units, the printing volumes of the course materials could be controlled effectively so that wastage in printing the course materials could be prevented. This could avoid the piling up of the course materials in the warehouse and prevent excessive cost of printing in certain period of time.



Below: Preparation of master for the printed learning materials.

The receiving of the course materials was done by the Distribution Center after going through quality control process in PPBAC for the printed materials, and in P2M2 for the non-printed materials. Then, the course materials were piled up in the Distribution Center's warehouse and the receiving data were entered into the computer. The process of data entry had to be done immediately to ascertain that the course materials were ready for delivery order.

Delivering the course materials was done based on the delivery order (DO) prepared by BAUK upon the disposition of the Vice Rector Operational Affairs. Based on receiving the DO, the Distribution Center assembled and prepared the delivery of the learning materials.



The activity in the Warehouse of the Learning Materials Service Centre

The delivery of the course materials from the UT Head Office to the Regional Offices used the UT own vehicles, especially for those located on the islands of Java, Bali, Lombok, and in South Sumatra. While for other regions, the delivery used the Post Office services. Based on the considerations of delivery cost and timeliness, the delivery of the learning materials gradually handed over to private freight-forwarder services.

All the delivery steps, starting from creating the DO until delivering the course materials recorded in the computer, so the stock of the course materials in the UT Headquarters Center could be identified every time it was needed. The stock of the course materials in Regional Offices could be identified from the monthly reports received by the UT Headquarters from the Regional Offices. With the application of the computerized system in the management of learning materials in the Regional Offices, the ordering and reporting of stock of the course materials could be done automatically.

The computerization in the management of the course materials required regular updating of data immediately after every transaction of activities. Delay in updating of the data would cause inconsistency between the data stored in the computer and the real stock available in the warehouse. Updating the computer programs and improving the human resource competencies were carried out continuously.

Beginning in 2004, improvement of the application system for the course materials distribution was conducted. The outdated distribution application based on the FoxPro Database System was changed into Sybase Database System. The advantage of this new system was that the Sybase had larger capacities so that the processing of the course material distribution services could be conducted faster and more reliable. The migration into the new application system for the course materials distribution began in 2004, starting with the regular course materials (non-elementary education) and then followed by course

materials for the PGSD (In-service Teacher Education) program. During the migration period to the new application in 2004, the learning material services in the UT Headquarters were carried using two separate applications, that is, the new application was for regular study programs, and the old application for Primary Education Study Program. In 2005, the learning materials services had already used the new distribution application system for all study programs.

There were constraints during the migration process into the new application, particularly related to consistency of stock data between the one in the warehouse and that in the computer. Additionally, there were also constraints in operating the new application, starting from the process of making the Printing Order Letter, goods receiving, and issuing the delivery order to printing the delivery letter (UT03). However, thanks to the hard-working staff and good cooperation between the Distribution Center, the Computer Center and other related units, the UT could overcome all those constraints. With the new application system for the course material distribution, the process of learning material services, including determining of printing quota, making letter of printing order, receiving of the learning material, warehousing, making delivery order, assembling and delivering the course materials, and reporting could be done faster and more accurately.

The improvement of the course material services not only done by replacing the application, but also by restructuring the organization along with the changes of UT organization. In April 2004, UT implemented the new organization structure based on Decision of the Minister of national Education Number 123/O/2004 dated October 6, 2004, replacing the preceding organizational structure based on the Decision of the Minister Number 168/O/1995. The Distribution Center became one of restructured unit. The new name is the Learning Material Service Center (*Pusat Layanan Bahan Ajar/Puslaba*), and the position of the Head of the Division has been changed into Coordinator. There were four Divisions and one

Administration Subdivision in the preceding organizational structure. This has been restructured into three Coordinators and one Administration Subdivision. The three Coordinators are Warehouse Coordinator, Delivery Coordinator, and Distribution Information System Coordinator. The Packaging Division in the previous structure was reduced and the job and function were merged in the Warehouse and Delivery Coordinator. In the old organizational structure, the Distribution Center was directly under responsibility of the Rector, and in its daily activities it was supervised by Vice Rector III (Operations). In the new structure, the Learning Material Service Center is under the coordination of the newly established Institute of the Development of Learning Materials, Examination, and Information System (*Lembaga Pengembangan Bahan Ajar, Ujian dan Sistem Informasi/LPBAUSI*), along with other Centers within the Institute, including the Printed Learning Materials Production Center (*Pusat Produksi Bahan Ajar Cetak/PPBAC*), the Non-Printed Learning Materials Production Center (*Pusat Produksi Bahan Ajar Non Cetak/PPBANC*), the Examination Center (*Pusat Pengujian/Pusjian*) and the Computer Center (*Pusat Komputer/Puskom*). In the new structure, the Delivery Order (DO) for course materials is no longer issued by the Bureau for General Administration and Finance (BAUK), but by LPBAUSI. All requests for course materials from Regional Offices must be addressed to LPBAUSI and the stock control and sales of the learning materials in Regional Offices is carried out by LPBAUSI. In brief, the business process of the learning material services in the new organization structure can be seen in Figure 1.

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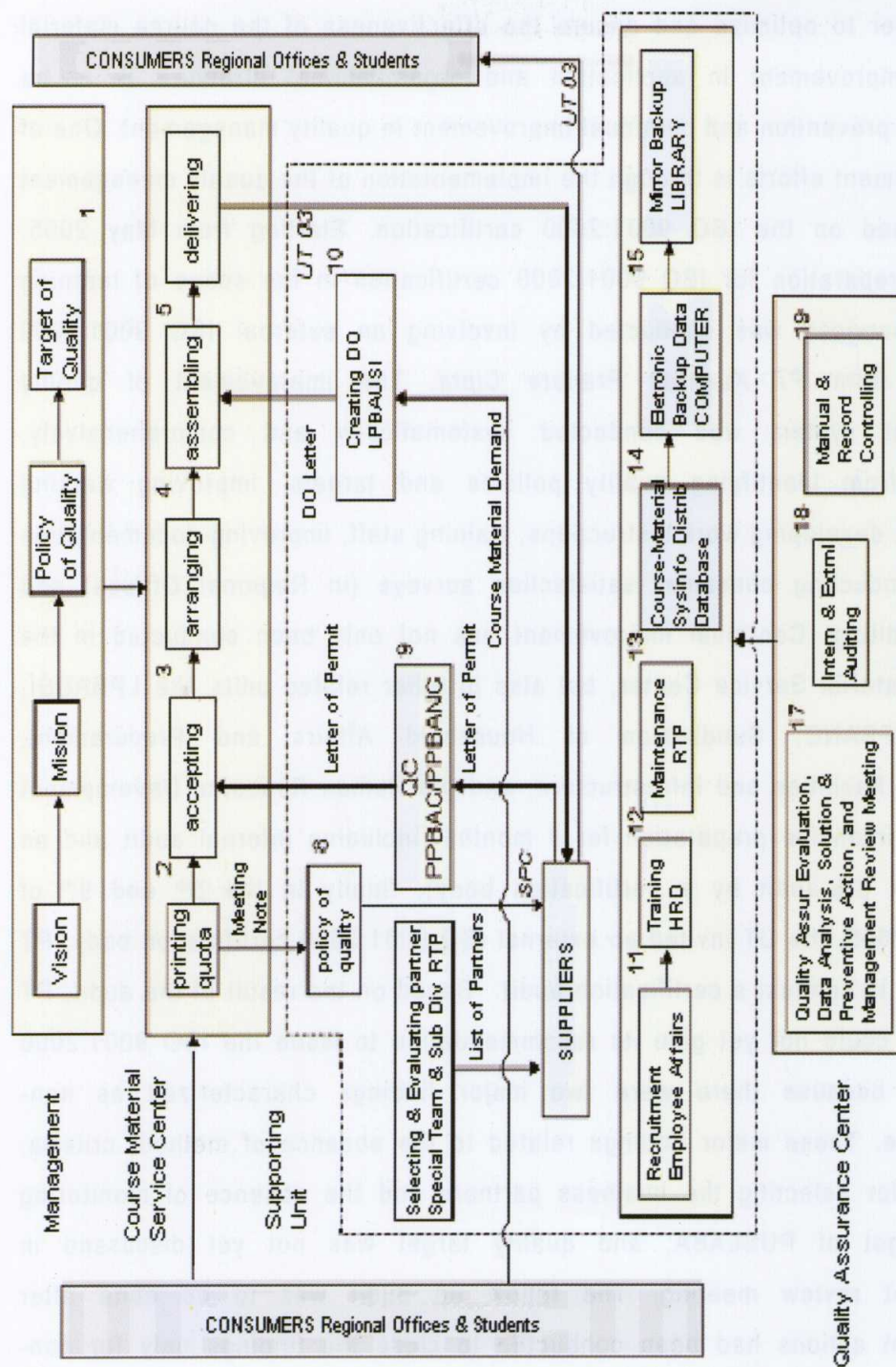


Figure 1.
The Bussiness process of the learning materials services

In order to optimize and ensure the effectiveness of the course material services, improvement in application and organizational structure is to be followed by prevention and continual improvement in quality management. One of the improvement efforts is through the implementation of the quality management system based on the ISO 9001:2000 certification. Starting from May 2005, intensive preparation for ISO 9001:2000 certification in the scope of learning materials services was conducted by involving an external ISO 9001:2000 consultant from *PT Kualitas Pranata Cipta*. The improvement of quality management system was conducted systematically and comprehensively, beginning from identifying quality policies and targets, improving working procedures, developing work instructions, training staff, improving documentation system, conducting consumer satisfaction surveys (in Regional Offices) and internal auditing. Continual improvement has not only been conducted in the Learning Material Service Center, but also in other related units like LPBAUSI, PPBAC, PPBANC, Subdivision of Household Affairs and Procurement, Subdivision Facilities and Infrastructure, and the Human Resource Development Unit. After intensive preparation for 8 months (including internal audit and an independent pre-audit by a certification body), finally in the 8th and 9th of December 2005, the UT invited an external ISO 9001:2000 certification body, PT SAI Global, to conduct a certification audit. Based on the result of the audit, PT SAI Global could not yet give its recommendation to issue the ISO 9001:2000 certificate, because there were two major findings characterized as non-conformance. These major findings related to the absence of method, criteria, parameter for selecting the business partners and the absence of monitoring quality target of PUSLABA, and quality target was not yet discussed in management review meeting. The follow up audit was to be done after improvement actions had been conducted to close the findings only for non-conformance, and for areas of concern for improvement but also opportunity for

improvement. In the 24th of February 2006, a follow-up audit was conducted and the two non-conformance findings and some other findings were stated as closed. SAI Global concluded that the Learning Material Services Center (PUSLABA) and other supporting units had implemented quality management system as required by the standards of ISO 9001:2000 and recommended to issue the Certificate of ISO 9001:2000. Finally, the Certificate of ISO 9001:2000 was handed over by Country Manager of SAI Global to the Rector of Universitas Terbuka during the Opening Ceremony of the UT National Coordination Meeting on the 14th of March 2006.

Future Challenges (2006-2010)

Obtaining the certificate of ISO 9001:2000 does not mean that all problems of course material services can be overcome. Continual improvement has to be done in accordance with the stated quality target. There are many challenges to be faced. The students living far from the Regional Office still have difficulties in getting the course materials due to the transportation constraints. There are still students who cannot have their course materials only just before the examination period because the stock has been running out. In order to cope with the limited stock of the course materials, the procurement of the course materials in UT Headquarter and Regional Offices must be planned carefully. Improvement of the learning material service system must be done continually, starting from the writing of the course materials, preparation of the print-master, to reproduction and distribution of the materials. In order to cope with transportation constraints faced by the students living far from the Regional Office town, the UT has been developing course material sales system via the internet (e-bookstore). In the future, the UT students do not have to come to the Regional Office to buy the course materials, but they can also order the materials via the internet and the

materials can be delivered to the students' addresses of or the nearest service unit to the students. By continually improving the learning material services, it is expected that the distribution of the course materials to the students can be done fast, accurately, and efficiently, so that the stated vision and mission in the distribution of the course materials to support the institutional vision and mission of UT can be achieved.

In order to achieve the stated vision and mission, UT has to make all the effort focusing on the achievement of the vision and mission. The Rector of UT insists that the learning material service system plays an important role in the UT management in the future. The specially designed course materials have to reach the students timely. The delivery of the course materials has to be supported with a reliable distribution system. The course materials should be timely distributed and easily accessed by students. For this reason, UT has to provide an appropriate number of course materials and it must be supported by an automated inventory control system.

To face these challenges, improving the system of the learning material services should be continuously conducted in terms of human resources development, facilities and infrastructure, management, and computer application. The training and development of staff must be continuously conducted. The understanding and mastery of the system and the work procedures must be increased, so that staff must have competencies in performing their jobs and maintaining their responsibilities. The system and work procedures that have been developed have to be consistently implemented and regularly evaluated so that they can be continually improved as needed. Continual improvement both internally and involving external units have to be done. Awareness of developing the quality management system that has become strong commitment of all units, from the top management down the hierarchy to the staff level must be maintained and continually increased. By

achieving the ISO 9001:2000 certificate, the quality management system should be used as a trigger to continually improve the learning material services to the students, and could positively bring about constructive effects for overall development of UT.

Conclusion

The UT management system, including registration, distribution, and evaluation functions, and the subsystem of learning materials and examination, is completely under the control of UT because they are handled by the units and human resources directly controlled by UT. However, the UT cannot totally control the learning process subsystem performed by the students. In the context of distance learning which requires the students' independent learning, the students are autonomous in determining and conducting their own activities – starting from learning the materials, working on assignments, solving their learning problems and difficulties, forming study groups, organizing time and places, and selecting the learning strategy – by referring to the course materials that have been designed and specially prepared by UT. However, learner independence does not mean that UT let the students face their learning process on their own. The UT provides assistance and learning support and services needed by the students, such as various modes of tutorials, counseling, academic guidance, and giving evaluation feedback to the students.

In accordance with the UT vision 2010 to become one of the centers of excellence in Asia in the practice, research, development and information dissemination, the UT continually reengineer and improve its system and subsystem in order to achieve its stated vision. The reengineering and improvement of the quality standards have been established and maintained through the use of a set of documented manuals and procedures through the

implementation of the UT Quality Assurance System, and this was officiated in 2004 by the Rector statement as: "Universitas Terbuka enters the Era of Quality Assurance System Spirit in 2004".

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The Development of Student Support Services

KRISTANTI AMBAR PUSPITASARI and SURACHMAN DIMYATI

Introduction

Student Support Services at Universitas Terbuka (UT) are available for students as well as for prospective students. At UT, support service is known as student support service. In general, it is aimed at (1) facilitating and helping students' learning process, (2) encouraging the students to be able to study independently, (3) responding to the students' questions and requests quickly and efficiently, and (4) solving the students' problems accurately and timely (Puspitasari, 2002b).

The UT support service includes providing information and consultation, academic administration services, as well as academic services. In the case, the

relation between student support service and service users can be described as follows:

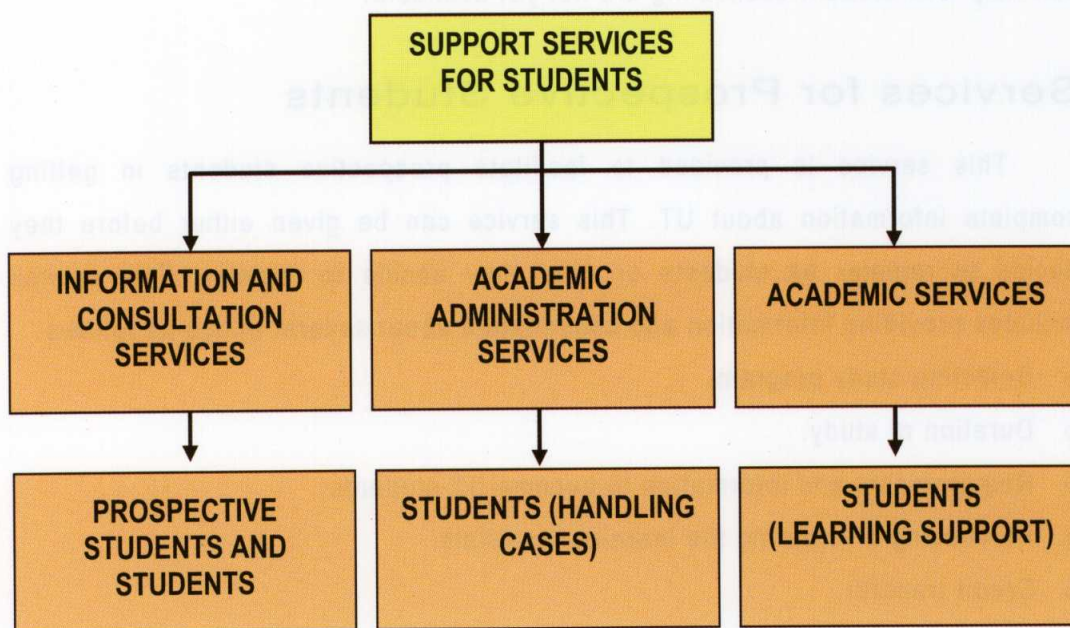


Figure 1.
UT learning support services

Information and Consultation Services

Providing information and consultation is an important service in an open and distance learning system applied at UT, bearing in mind that students are separated physically from the university, the lecturers, and from fellow students. This service is intended to provide complete information to the students or prospective students. By getting the information easily and completely, the students or prospective students are expected to be better motivated in learning and to get assisted in solving their learning difficulties during their studies at UT.

From time to time, the students can have consultation in connection with choosing study program, selecting suitable courses, having problems with their

studies, or making learning plans and strategies. In this case, the consultation provided is in academic areas, and not personal ones because professionals that can help with student counseling are not yet available.

Services for Prospective Students

This service is provided to facilitate prospective students in getting complete information about UT. This service can be given either before they decide to register as students or after they decide to register. This service includes providing information and consultation about several things as follows.

- Selecting study program.
- Duration of study.
- Requirements and information to become UT students.
- Purchasing or ordering the learning materials.
- Credit transfer.
- UT learning system.
- Information about type, location, and schedule for tutorials at UT.

For the UT graduate (master degree) program, there are additional services for the prospective students and students, such as:

- Information about designated Regional Offices offering the graduate program.
- Registration and entry test into the graduate program.
- Information about the entry test subjects.
- Announcement of the entry test results.
- Information about residential supervision for master's program final project assignment.
- Information about examination of master's program final project assignment.

Provision of information and consultation service for prospective students is expected to help them in choosing the suitable program for them so that it can decrease the possibility of drop-out.



UT information service for prospective students

According to Lockwood (1995), the service given at the beginning of registration period can affect the success of their studies. Considering the fact that prospective students are working people, in the consultation process, they are given information about time management. Prospective students often do not understand the commitment needed to study in a distance education system so that they have a lack of awareness about the importance of managing time effectively for working, studying, having commitment with their families in accordance with the number of credit courses taken in order to finish their studies timely. Therefore, all questions they have should be addressed completely in order to decrease the level of possible drop-out because of the lack of information about the UT distance learning system and the required learning commitment that they must have.

Services for Students

This service is generally provided for UT students who need information on registration process, data changes, examination results, and graduation status. The information given to the students includes the following.

- Student registration status.
- Changing data on course registration.
- Academic leave. This does not apply to graduate students, because each of the Regional Offices does not always offer the same graduate programs in each semester.
- Consultation about taking semester credit courses based on the student's learning achievement in the previous semester.
- Information on tutorial schedule.
- Information on *yudisium* (the decision about when students are stated as eligible to graduate) and graduation schedule.
- Data changes, such as name, address, and Regional Office.
- Information on examination results.
- Consultation about overall student learning achievement.
- Learning strategies to improve learning achievement.
- Getting academic transcript in the English language.
- Getting letter of recommendation for continuing studies to the higher level.

Students and prospective students of UT are spread all over Indonesia. Their access to information varies depending upon the availability of communication facilities in the region. In order to reach students and prospective students wherever they are, information service is provided using various means and media.

- *Provision of information brochure about UT and Study Program*

Brochures about UT and Study Program are circulated in the UT Headquarters and 37 Regional Offices throughout Indonesia.

- *Provision of catalogues*

The UT catalogue contains important information about UT, including registration and examination, list of all Study Programs and curriculum offered, terms, academic rules, and important addresses of Regional Offices and other relevant offices. This catalogue is a source of information about main academic rules for the students.

- *Study orientation meeting for new students*

Study orientation for new students is conducted in Regional Offices in the beginning of the academic year. This meeting is aimed at introducing the UT learning system, introducing new students to UT administrators in the Regional Office and peer students, and giving information about the UT student learning support services.

- *Provision of UT website through the internet accessible through: www.ut.ac.id*

This service has been available since 1996. The strength of web-based information is that the information about UT can be accessed from all over Indonesia, and even from all over the world twenty four hour a day. The weakness is that although internet kiosks can be found in small cities, the habit to seek information or browsing through the internet still needs to be established.

- *Provision of academic calendar at the UT Headquarters, Regional Offices, and website*

The academic calendar is given to the students after they register. It can also be seen through UT website.

- *Provision of information and consultation service through electronic mail :*

info@p2m.ut.ac.id, pelma@p2m.ut.ac.id, and pps@mail.ut.ac.id

UT provides information and student services through electronic mail. Since 1998 the email address info@p2m.ut.ac.id has been available for prospective students and the community who need information about UT. While the email address pelma@p2m.ut.ac.id is available for the students who need information service, academic administration service or academic service. Information service for post-graduate programs can be accessed through the above emails or directly to pps@mail.ut.ac.id.

The strength of this electronic mail is the speed of the information the UT can receive so that it can be immediately answered. This service gets positive response from the students. It is also effective because it saves the students' time and energy in dealing with a case without necessarily having to come to the UT Headquarters. Through this facility, the students can get explanation of the cases they are dealing with. Meanwhile, documents needed to settle the cases can be sent by post or facsimile. The response from UT can be obtained quickly by the students as the electronic mail can be received in seconds after being sent.

Academic Administration Services

Learning support service in the form of academic administration service is provided to help students to deal with problems related to registration, provision of learning materials, examination, and access to academic data (Puspitasari, 2002a). This service is aimed at identifying the students' problems and settle their cases in accordance with prevailing academic rules. Problems that cannot be solved because they are against the rules are informed to the students either orally or in written in order to ensure that they do not make the same mistakes in the future. Academic administration service is expected to decrease non-

academic constraints that can hamper the students' learning process and their studies at UT.

Academic administration problems faced by the students include the followings.

- Difficulty in getting forms for paying tuition fee.
- For certain reason sitting for examination in an examination location other than the previously designated location.
- Making mistake in filling out their own personal data (name, address, Regional Office, Study Program)
- Registered students who are not registered to take examination.
- Not receiving the learning materials ordered.
- Unavailability of the learning materials in Regional Offices.
- Not receiving the approval letter for credit transfer.
- Discrepancy between the approved courses and proposed courses for credit transfer.
- Not receiving the examination results or dissatisfaction with the results.
- Not listed on the students eligible to graduate in spite of meeting the requirements.

For graduate students, apart from the above matters, there are other problems as follows.

- Difficulty in following online tutorial. This is generally caused by the lack of knowledge in accessing the internet and the unreliable network as well as the slow access to the internet.
- Students' delays in registration for re-taking the examination in the current semester. This has often happened because the time space between the announcement of examination results and the closing-date for registration to take the examination is only 10 working days.

In order to give fast and accurate services, UT develops computerized data record system. This is needed in order that student data can be accessed easily when it is required, bearing in mind that the number of students reaches hundreds of thousands. Therefore, different from information provision services, the academic administration services generally can only be provided at the UT Headquarters. This is because the processing and storage of student academic data are done centrally. The Regional Offices are not yet eligible for this kind of service, considering the reasons of data security and availability of facilities (especially computers and the network system) in Regional Offices.

The academic administration services that UT provides for the students are as follows.

- *Student Services through Student Service Unit (PELMA)*

In 1996, the Student Service Unit (PELMA) was re-established, functioning as the gate for the students who want to communicate with UT, either through letters, facsimile, telephone, or coming directly. The main task of PELMA is to serve the students or prospective students who come to the UT Headquarters everyday from Monday to Friday, from 8 a.m. to 4 p.m.

Staff at PELMA include: (1) an academic staff, (2) two staff at Registration Office, (3) two staff at the Examination Center, (4) a staff at the Distribution Center, (5) a staff at Budget Subdivision, and three administrative staff. This staff composition shows that UT considers that students' problems are generally related to academic administration matters. In this case, student learning supports should be given more attention, whereas academic supports are important services that should be provided by every distance education institution. Therefore, students who need consultation service or academic counseling are asked to contact the respective Faculty. Ideally, in every faculty, under the coordination of Vice Dean of Student Affairs, there should

be academic staff who are always prepared to serve the students who come directly or contact UT through letters, telephones, facsimiles, or electronic mails. By establishing the PELMA unit, students who have academic administration cases can usually be assisted faster because the registration and examination data processing can be done from PELMA. The prospective students and students who come directly to the PELMA Office for getting the information needed will get faster services, while those who do consultation face-to-face and cannot be taken care of by PELMA are suggested to contact directly relevant units, such as the Faculty or the Post-graduate Program.



Student services in Unit Pelma at the UT Headquarters.

From 1999 staff at the Distribution Center (now Learning Material Service Center or so-called *Puslaba*) are not assigned anymore at PELMA because *Puslaba* only meets demands for learning materials from the Regional

Offices, not from the students directly. To substitute this staff reduction from *Puslaba*, PELMA gets an additional academic staff. With this additional staff, services through telephone, facsimile, and electronic mail are handled better.

All inquiries, consultation or cases received can be dealt with in the same day. All cases unsolved by PELMA are to be handled by relevant units. However, there is still lack of professional staff who are competent in giving guidance in developing lesson plan and counseling at the beginning of studies. Whereas, they should be assigned as well at PELMA and in every Regional Office.

This service is effective to help students who have the time to deal with their problems directly so that they can be taken care of quickly. This kind of service is used by them to get their academic records. However, this service is not effective to deal with the problems collectively because they vary and take quite a long time to deal with, for collective cases, students are suggested to use facilities such as electronic mails, telephones, facsimile, or letters.

In dealing with the students' problems, PELMA works together under the coordination of the Vice Rector of Student Affairs and the Bureau of Student Academic Administration, Planning and Information System (so-called *BAAKRENSI*), which now becomes Bureau of Academic Administration, Planning and Monitoring (*BAAPM*). Those units work together with relevant units at UT, such as Examination Center, Learning Material Service Center, Computer Center, and the Faculty and Post-Graduate Program. However, in fact, there is a lot of time consumed to serve the students who come directly so that the response sent by letter, facsimile, and telephones cannot be handled well. For that reason, from 1999 a decision was made that letters that relate to academic administration matters should be sent to *BAAPM*, while those related to academic matters are to be sent to relevant Faculties.

Therefore, PELMA unit only serves students who come directly or who contact UT by telephone or electronic mail.

At the beginning, electronic mail addressed to pelma@p2m.ut.ac.id is tackled by PELMA, while electronic mail addressed to info@p2m.ut.ac.id is tackled by BAAPM. From 2002, both addresses are joined together and tackled by BAAPM. Then, in 2006 the electronic mail info@p2m.ut.ac.id was changed into info@mail.ut.ac.id. Questions addressed to the Graduate Program through info@mail.ut.ac.id will be forwarded to pps@mail.ut.ac.id. From 2005 PELMA is under the coordination of BAAPM. As the result, the service given by PELMA is emphasized more on academic administration services so that all the functions of academic counseling are returned to each of the respective Faculties.

- *Student Service through telephone, facsimile, and letters*

The students who do not have internet facilities in their areas can use telephone as a means of fast communication. Although it is expensive, this facility is effective for counseling activities because they can put their problems forward. One weakness is that many callers do not know the UT telephone service system so that many telephone calls come to PELMA which are supposed to come into other units. This causes losses on the students' side, as they cannot contact PELMA because the line is too busy. If academic counseling through telephone is not fully given by PELMA, it will be transferred to lecturers or academic staff at the faculty or the Post-Graduate Program.

Communication through letters is easily done by the students at relatively small cost. However, this service is considered to be less effective because too much time needed to find their addresses. To make this easier, all their letters sent by post should be addressed to BAAPM as provider of information and academic administration services or to the Dean or Director of Graduate

Program for academic counseling or services. Services through facsimile are more effective than letters sent by post because UT receives them more quickly, and the cost is smaller than telephone calls.

FORM Permintaan Nilai - Microsoft Internet Explorer

Address: <http://public.ut.ac.id/html/nilai/nilers.htm>

Formulir Permintaan Peragaan Nilai Mahasiswa Program Reguler

(Daftar Nilai ini sekedar untuk Informasi dan TIDAK DAPAT digunakan sebagai bukti otentik sehingga TIDAK DAPAT dipakai untuk mengklaim ... !)

NIM :

Tanggal Lahir : Format : ddmmyyyy (15021973)

Masa Registrasi/Ujian :

(Perlu waktu kurang lebih 5 menit untuk proses)

Examination results service through the UT website accessible via internet

- Examination results service on the website

In 1999, UT started to provide examination results service through the internet. This is considered positive by the students, because there are quite number of students who do not get their examination results because of incomplete addresses. One of the weaknesses of the UT database is too little space available for address so that the students' address stored in the UT computer system is not complete. Therefore, many of the students do not receive their examination results.

- *Response Forum service*

Since 2004 UT has opened a response forum on the website to provide the students with the facility to communicate with each other, or with tutors and UT administrators (Prasetyo, 2006). This service attracts many students. They can discuss or just talk about their academic problems during their studies at UT. They can remind each other of the last date of registration, finding a study mate, even consulting their examination results that do not yet come out, or other things such as learning materials.

- *Academic administration services in Regional Office*

The same as at the UT Headquarters, academic administration services are also provided by the Regional Office. They include registration process and learning materials purchases, while other academic administration matters such as marking examination process and transcript request cannot be dealt by the Regional Office. In this case, the Regional Office has to let BAAPM at the UT Headquarters deal with the matters.

Registration process and learning materials order cannot yet be done online so that this should be done at the UT Headquarters through the internet or floppy disc for the Regional Office in which internet connection is still slow.

In 2000/2001 the Regional Offices started to have facilities such as student record display and transcript printing per semester. Therefore, from 2001 the students do not necessarily contact the UT Headquarters to find out their examination results and GPA (grade point average). By providing the examination results at the Regional Offices, they can thus give academic counseling to the students in the form of information on courses they have to re-take and their GPAs. However, to have all the information about grades, students and the Regional Office have to use the academic transcripts display available on the UT website from their own region.

Academic Services

Academic services are given to the students who need assistance in academic matters faced in studying the learning materials. They can get academic services such as tutorials, academic counseling service, and library service.

- *Tutorial service*

UT students are required to study on their own, in a study group or by attending tutorial. Tutorial is expected to help students who have difficulty in understanding the learning materials, but it is not expected to be like teaching or lecturing activity as in the face-to-face higher education institution. As a result, the proportion of self-study is bigger than that of tutorial. Considering the varieties of students' ages, educational backgrounds, jobs, and learning facilities they have, it can be assumed that their learning ability and perception vary. Therefore, it can also be assumed that there are some of them who need learning support in the form of tutorial.

Tutor is a content expert who has the mastery of certain subject and has qualifications that are almost the same as conventional educational institutions (McInnis-Ranklin and Brindley, 1986). Tutorials at UT are given in the form of face-to-face, written, and online tutorials. Every form of tutorial has strengths and weaknesses. Tutors for face-to-face tutorials are academic staff at UT or other lecturers from other universities. While tutors for written or online tutorials are the UT own academic staff.

According to Race (1990), tutors' roles are (1) to give feedback to the students, (2) to teach either face-to-face or through communication devices, (3) to give support and guidance including how to motivate and help them develop their learning skills. Ideally, each student has the right to get tutor assistance, either it is related to the contents of the courses or it is in the form of counseling. However, the UT tutorials are emphasized on giving

learning support to the students who need it. So, tutorials are mainly emphasized on giving explanation about the content of particular courses they do not understand. Things which are usually asked by the student in tutorial sessions are as the following.

- The content of the module that is difficult to understand.
 - The application of concepts learned from the learning materials.
 - Difficult formative tests and exercises.
 - Learning preparations for final examination or final project, etc.
- *Academic counseling service*

Academic counseling service is done for individual students through letters, electronic mail, facsimile and telephone. They can send letters, facsimile, electronic mail or make a telephone call to relevant Faculty or Post-Graduate Program for consultation on course content that is not well understood. Every student can do written counseling through letters individually. This kind of counseling has strengths and weaknesses. Its strengths are it can be done by every student, even from remote areas. However, it is not very efficient because it takes a long time to get to UT. Not being able to answer the students' letters in quite a long time can demotivate them because they can feel that UT ignores them.

In the meantime, the students who live in the cities that have internet facilities and those who are willing to make use of these communication facilities can make academic consultation related to the content of the course through the electronic mail. The strength of the electronic mail is that they can receive the answers immediately, because academic staff in the Faculties or the Post-Graduate Program can receive the electronic mail only within seconds after being sent. Therefore, the students can be assisted in learning. Beside that, the students or their tutors can send files that contain pictures or

graphics easily if necessary in order to complete the explanation of particular courses. The students' expense to communicate is quite cheap compared to the benefit they can get.

The other strength for counseling through electronic mail is that the students' questions and tutors' responses can be put in a discussion forum through the internet so that they can be read by the students who subscribe to the discussion forum facilities and they can create good atmosphere for discussion because other students can join the question sessions. Counseling through facsimile can be an alternative for the students because it reaches the destination faster than the postal letter although it is slower than the internet. The other weakness is that the writing are often unreadable when it reaches the receiving facsimile machine. Unfortunately, until now there has not been any tutor appointed as the students' advisor during their studies at UT and they have got no access to the tutors' names for each course to be contacted if they have difficulty in learning. Nevertheless, counseling can be done through electronic mail on info@mail.ut.ac.id, and the manager will transfer this to the relevant Faculty or the Post Graduate Program.

Academic counseling service through telephone is not recommended for discussion or explanation of the content of the courses because the airtime is expensive. Beside that, there has not been appointment of academic staff on schedule to be the students' advisor who can be contacted at anytime to provide academic counseling.

- *Library service*

Beside tutorials and academic counseling services, UT also provides learning sources such as the library. UT is today developing an e-library system that enables students to access knowledge through the internet. Nevertheless, UT still needs to expand its e-library capacity especially in

order to help the post-graduate students access e-journals either national or international ones.

The library is not only available at the UT Headquarters. In 1996, UT provided academic support service such as mini libraries in several Regional Offices funded by the Canadian International Development Agency (CIDA). The Regional Offices are expected to become the learning resource center for the students.

They can use the learning facilities such as mini libraries and discuss with fellow students. Mini libraries provide:

- Printed learning materials (modules),
- Non-printed learning materials (audio-cassette and video), and
- Recorded radio and TV broadcasts.

Mini libraries at the Regional Offices also have computer facilities that provide Computer Assisted Instruction (CAI) that have been developed by the UT academic staff. Unfortunately, this facility is not made use of by the Regional Offices to attract and supervise the students. This service is worth developing its sustainability by adding computer facility connected to the internet network.

Every Regional Office is supported by academic staff and learning facilities so that the Regional Office is supposed to be able to provide academic counseling services. Unfortunately, until now there has not been a comprehensive research on academic counseling services either at the UT Headquarters or in the Regional Office. In addition, it is still unknown whether the academic staffs at the Regional Office are able to give academic counseling or how many students need counseling or attend tutorials. It is still also unknown whether tutorials work well, or whether the tutors have the ability and commitment to perform the tutorials, or whether the students

attend tutorials regularly, or to what extent tutorials help them in their studies.

Learning facilities at the Regional Offices are supposed to be made use of by the students. However, not many students are aware of the provision of the learning facility. Beside that, there has been no effort to give training to the students so that they can use the learning facilities, such as how to use computer aided instructional materials.

Conclusion

Learning support services for the students are the integral part of distance higher education system. For prospective students, the services need to be given in the form of information and counseling. Sufficient information on the programs offered and the learning system UT applies at the beginning of registration period are expected to be able to help the students prevent from dropping out or moving to another university. Beside these services, UT also provides services such as dealing with academic administration matters as well as academic support services in the form tutorials and mini libraries. Tutorials are carried out in groups or individually either face-to-face, written, online, or by postal correspondence, internet or facsimile.

The development of learning support service system in distance higher education institution should carefully consider who needs assistance and what kind of assistance the students need. Once the students' needs for assistance has been identified, the administrators of the distance higher education institution can determine the way to give it by considering some factors such as cost, technology and geography. In order to know whether the services reach the target and meet the requirements for the improvement of quality service, it is necessary to do continuous assessment.

UT services for students still need to be improved. The services need to be focused on continuous academic counseling from learning plan counseling (selection of program and courses), tutorials for those who need it, to feedback on learning progress. In the light of different characteristics between post-graduate programs and the diploma and bachelor (*Sarjana*) programs, it is a must for each Regional Office that offers the post-graduate program to assign two of its staff to handle the program. Computer network facility at the Regional Office connected to the UT Headquarters needs to be given priority in order that student services at the Regional Office can be optimized.

Assessment of the quality of student services needs to be done in order to find out whether the services available are suitable for the students' needs, or they can be given immediately and accurately, or they are satisfied with the services offered, etc. The UT needs to conduct research in tutorials and academic counseling. The research is aimed at finding out the effectiveness of every kind of learning support for the students. The assessment and research results will become effective feedback for UT to improve its service quality for the students either administrative or academic services. Concerning the post-graduate program, the student services, especially when they want to write their thesis, need to be improved. Individual supervision between the supervisor and the student at the time of writing usually creates a constraint in communication between the two parties.

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Development in The Number of Students and Alumni

SULAEMAN AND LELES SUDARMANTO

Increasing Number of Students

Universitas Terbuka (UT) is a distance higher education institution in Indonesia, which was established and started enrollment in 1984. At the beginning, it attracted many high-school graduates who could not be accepted in regular state higher education institutions. The development of UT in term of the number of students, during the first 22 years, can be described as follows.

1984 – 1985 period

In the first enrollment in 1984, UT could accept as many as 54,035 students. In 1985, the number of students increased as many as 46,910, so that the total became 100,945 students. This was a huge number because in two years UT had already have more than 100,000 students. In this period, the enrollment was only done once a year and they had to take a course package determined in each Study Program for each semester.

1986 – 1989 period

In 1986, UT started to apply new registration policy that could be done throughout the year. Students could choose any courses offered. Besides, in the same year, three registration periods in one year were applied and the enrollment was just carried out in every semester. The number of new enrollment was 19,655. However, three registration periods brought a lot of problems in provision of UT services to the students. So, in 1987 the number of enrollment (new registration and re-registration) decreased drastically to 16,135 in one semester. In this period, the number of students reached the lowest point so that it required hard work to rebuild the UT image concerning its services so that the students would return to UT for re-registration. After a comprehensive and careful assessment, it was found that UT was not able to apply three registration periods a year. Therefore, since 1987 UT has returned to apply two registration periods within a year. As a result of improving its services, in the years to come the number of enrollment has increased continuously.

1990 - 1999 period

This period was the glorious period of UT from the point of view of the number of student registration. In 1990, the Directorate General of Primary and Secondary Education assigned UT to offer In-service Primary Teacher Education Diploma II Program (*Program Penyetaraan D-II PGSD*)². The number of students recruited through the scholarship scheme in 1990 was 22,822, plus 1,988 self-paying students. In the second year in 1991, there were 52,162 students enrolled, consisting of 33,282 students through scholarship scheme and 18,880 self-paying students. In the third year in 1992, there were 49,933 students enrolled, consisting of 23,293 students through scholarship scheme and 26,640 self-paying students. This continual growth of enrolment lasted until 1999. The

² The Government requires primary school teachers to hold D-II certificate which is done through upgrading program.

highest peak in the number of student registration was 115,161 during the 1993.2 registration period. In this period, apart from running the *D-II PGSD Program*, UT was also assigned by the Directorate General to offer the Diploma III for In-service Secondary Teacher Education Program (*D-III PGSMP*)³ through a scholarship scheme. The composition of the new student registration in the Education Program during the registration period of 1993-2 consisted of 8,718 students of Regular Program (so-called *Non-Pendas Program*), 90,351 students of *D-II PGSD Program*, and 16,092 students of *D-III PGSMP Program*.

The number of student registration (new registration or re-registration) was 356,581 in 1995.2 registration period. However, after reaching the highest number of students in 1995, since 1996 the number of registering students had been gradually decreasing. In 1999.2 registration period, the UT registering students were 230,260. The composition of new registering students for regular program in this period was 29,884 and for *D-II PGSD Program* was 6,572. In this period of registration, the number of new registering students of regular program was quite high because it was supported by cooperation with the Department of Agriculture that recruited 5,893 agriculture extension staff to study at UT. Besides, there were 1.542 new registering students of *Akta IV Program* of the Faculty of Teacher Training and Educational Science.

2000 - 2005 period

Beginning in 2000 local autonomy policy was put into effect where the management of state finance was decentralized at district/municipal level. As a result, the cooperation of offering *D-II PGSD Program* at the central government level was discontinued, and UT had to work hard to establish cooperation with local government at provincial or district level.

³ The Government requires junior high school teachers to hold *D-III* certificate.

In this period, there was no significant increase in the number of students because not only UT had to work hard to cooperate with the local governments and other government agencies, but there was also high competition among higher education institutions themselves. This was because a lot of private higher education institutions were established in districts or cities, and *kelas jauh*⁴ (which literally means “distance classroom”), conducted by the state higher education institutions. In this period, the highest number of students was 45,274 in 2000.1 registration period. This consisted of 20,822 students of regular programs and 24,452 students of D-II PGSD program.

In the early 2005 UT was again assigned by the Directorate General of Primary and Secondary Education to offer S1 PGSD, and D-II In-service Pre-school Teacher Education Program (PGTK) under a scholarship scheme. In this registration period, the number of new registering students increased up to 54,598. The composition was 12,515 students of regular programs, 25,650 students of D-II PGSD program, and 18,095 students of S1 PGSD program and 3,002 students of D-II PGTK⁵ program. The number of new registering of 12,515 students included 3,676 students of Teaching Certificate Program (*Program Akta Mengajar*), and 1,852 students from Al Zaitun Muslim School through scholarship scheme.

Causes of Fluctuating Student Number

Based on the above description in the development of student numbers, it can be concluded that the fluctuating number of students was caused by various factors as follows.

⁴ *Kelas jauh* (literally means “distance classroom”) is lectures given to students of higher education institutions in different cities outside the city where the institutions are located. This sort of higher education practice is legally banned by the Directorate General of Higher Education.

⁵ The Government requires pre-school teachers to hold at least a two-year University Diploma (D-II).

Service System

The better the services to students, the more students register. As an example, this happened in 1986 when UT tried to improve its services to the students by applying three registration periods in one year. However, because the facilities and infrastructures could not support the service system, there appeared serious problems so that the number of students decreased in the following year.

Cooperation with other Government Offices

The highest number of registering students ever recorded was 356,581 in the 1995.2 registration period. Of this number, 251,435 of them (70%) were the students of D-II PGSD Program, and 44,116 of them (12%) were the students of D-III PGSMP Program. Until 2005 the number of students of D-II PGSD program was 696,184, S1 PGSD program was 40,223, D-III PTPL⁶ program was 11,122, D-III PGSMP program was 65,723 and the students who came from Al Zaitun Muslim School was 5,816. These programs, at the beginning, were cooperative programs with other government offices. Besides, there were still many cooperation's with other Government Offices such as PT Garuda, PT Merpati, BRI, BNI, TNI, PT ACS, and *Biro Pusat Statistik*.

Changes in the Amount of Tuition Fee

The increase in tuition fee brought about significant impact on the number of registering students, although after quite a while this would no longer become significant. As an example, the number of new registering students of regular program in 1999.2 registration period was 30,992. After the tuition fee increased from 6,000 rupiahs per semester credit unit to 11,000 rupiahs in 2000, the number of new registering students decreased to 21,715 in the 2000.1

⁶ The Government requires agriculture extension workers to hold at least a three year University Diploma (D-III).

registration period. Maybe there were other factors that influenced this fluctuation, but the impact of the increased tuition fee on the students was significant. The tuition fee was increased again in 2006 for regular program from 11,000 rupiahs per semester credit unit to 20,000 rupiahs per semester credit unit. Meanwhile the tuition fee for self-funded D-II PGSD Program increased from 362,500 rupiahs per semester to 750,000 rupiahs per semester. The tuition fee for the S1 PGSD program, from 757,500 rupiahs per semester to 1,000,000 rupiahs per semester.

Competition

The establishment of private universities in many areas has encouraged more students to obtain university diplomas or degrees, and the existence of the **legally banned** "distance classroom" (*kelas jauh*)⁷ has influenced the minds of many students who have initially intended to enroll for studies in UT. Even some students who have registered and obtained a number of semester credit units in UT have finally decided to move to private higher education institutions, which promise prospective students to graduate and earn degrees and diplomas more quickly.

The increasing number of students who have asked for temporary academic transcripts and letters of recommendation to study at other universities prove this.

Influence of fluctuating number of students on UT operations system

The UT operations system includes activities such as new student recruitment system, course registration, provision and distribution of learning

⁷ *Kelas jauh* (literally means "distance classroom") is lectures given to students of higher education institutions in different cities outside the city where the institutions are located. This sort of higher education practice is legally banned by the Directorate General of Higher Education.

materials, learning support services, assessment of student learning, and certification, all of which have been established to meet the needs and in accordance with the necessity and characteristics of the UT Study Program. In its continual growth, UT has developed its operations system as follows.

Regular System

At the beginning, UT applied a semester course package system for the students of Regular Program. This system was felt to be unsuitable because it was inflexible, it did not give freedom to students who wished to finish their studies quickly, and it complicated them when they had to retake the courses in which they failed. Therefore, UT changed it into a free registration system for the students of the Regular Program. In this system students have freedom to take any courses as long as they are in the curriculum and the examination schedules of the courses do not overlap in the same semester. Students were also not obliged to buy learning materials. The difficulty which was felt until this moment of writing with this operations system was the way to predict the needs and the distribution of learning materials, and also the way of implementing face-to-face tutorial services because students are not obliged to buy learning materials and the courses taken by students vary in each semester.

PGSD System

The operations system of the In-service Primary Teacher Education Program (PGSD) has been established in accordance with the necessity and characteristics of the program. In this system, students take a course package based on the semester sequence. They are obliged to buy or own the learning materials, and they can retake the course(s) that they fail in the examination. This system has made easier to predict and distribute the learning materials and to form study groups for face-to-face tutorials.

However, this system has made difficulties for the students to take an academic leave for several semesters, and then they want to continue their studies, because they have to find new study groups for tutorials. Besides, in this system proctoring examination becomes more difficult to implement because the students take the same examination papers in the same examination room.

PGSMP System

The system for the In-service Secondary Teacher Education Program (PGSMP) established by UT to serve students of D-III PGSMP was relatively the same as the PGSD system. However, because this system only accepted particular students for some semesters, it has finally been incorporated into the regular system.

PTPL⁸ and BKKBN⁹ Systems

The system for the Agricultural Extension Program (PTPL) was established for students of D-III PTPL based on the cooperation between UT with the Department of Agriculture. The system for the National Family Planning Coordinating Board (BKKBN) was established for students of D-III Extension Communication Program based on the cooperation between UT and BKKBN. Both systems were finally incorporated to the regular system like the PGSMP system.

The UT operations system influences the number of students, but on the contrary, the number of students served helps determine the UT operations system used. For instance, regular system will not be effective and efficient to implement the D-II PGSD Program that has a lot of students, as the regular system serves students individually, while the PGSD system serves students in group, so that the system will not be effective if the program has fewer students.

⁸ Agriculture Extension Worker

⁹ National Family Planning Board

Beside that, the UT funding source was about 80% from users and 20% from government, both from the routine budget and development budget. Almost all funds raised from the users comes from the UT own students in the form of tuition fees. Considering the larger proportion of budget coming from the students, drastic decrease in student numbers will have significant impact on UT operational activities. On the other hand, if the number of registering students increases, UT will have more flexibility in allocating the fund in order to meet the needs for routine expenses as well as development activities. The increasing number of students since UT was established is shown in Tble 16 in the attachment.

Alumni

Students who have finished their studies at Study Programs will be specified as graduates (alumni). The process of determining graduates is carried out through the procedures below.

- Sorting students qualified for receiving *yudisium*¹⁰.
- The process of sorting students qualified for receiving *yudisium* is conducted based on the criteria which have been determined by each Study Program.
- Validation of qualified students receiving *yudisium*.
- Validation of qualified students receiving *yudisium* is done by academic staff in each Study Program. Students who pass the validation process will be stated as graduates and it is formalized by the Dean's Letter of Decision.
- Determination of graduates.
- Based on the Dean's Letter of Decision, the Rector issues the Letter of Decision on Determination of Graduates. Finally students who have been stated in the attachment of the Rector's Letter of Decision can be called alumni.

¹⁰ *Yudisium* is the process to determine whether a student is eligible to graduate or not based on the number of credit units s/he finishes.

Up to the end of 2005, UT has graduated 634.264 alumni, consisting of 593,591 graduates of Faculty of Teacher Training and Educational Science (FKIP), 8,443 graduates of Faculty of Mathematics and Natural Sciences (FMIPA), 20,611 graduates of Faculty of Social and Political Sciences (FISIP), 11,253 graduates of Faculty of Economics (FEKON), and 6 graduates of Master Program of the Post-Graduate Program. All of the graduate data is registered in the database of the UT student record system (SRS).

In addition to that, UT has graduated further 19,199 alumni, consisting of 6.444 graduates of certificate program of LP3B FISIP, 3,211 graduates of D-I program of FKIP, 8,027 graduates of D-II program of FKIP, and 1,517 graduates of *Akta IV* program of FKIP. For this particular group of graduates, the number is noted but the personal data is not recorded because the graduate determination process was done manually.

Activities of Universitas Terbuka Alumni Association (IKA-UT)

The following illustrates some activities which have been conducted by the UT National Alumni Association (*Ikatan Alumni UT* or *IKA-UT*) from 2001 – 2006.

2001 period

In this year IKA-UT at central level carried out some activities as the following.

- Publishing a book about the result of National Conference and distributing the books to the Chiefs of Regional Alumni Association (IKA-UT) and the Heads of UT Regional Offices all over Indonesia, except for Aceh, East Timor, Irian Jaya, and Ambon.
- Attending public lectures in the UT Headquarters with the theme "Competition in the World of Work in AFTA", by Prof. Dr. Ermaya Suradinata, M.Si.

- Conducting coordination with the patrons of IKA-UT, that are Mr. Subagyo HS and Mr. Hendro Priyono.

2002 period

In this year IKA-UT at central level conducted some activities as the following.

- Distributing the information on the opening of the Masters Program to the Board Members of Regional IKA-UT and its branches all over Indonesia.
- Holding a coordination meeting with the UT Vice Rector III for Students Affairs
- Participating in a seminar in the first period of UT Graduation Ceremony with the theme "IKA-UT as an Umbrella Organization for Empowerment and Professional Development of UT Alumni" by Achmadi, Sri Sumijati, and Ali Yamin from IKA-UT Lampung.
- Inviting prominent alumni to the seminar in the second period of UT Graduation Ceremony, that is Mrs. Mooryati Sudibyo.
- Proposing tutor training to the Vice Rector for Students Affairs
- Attending public lecture at in the 18th Anniversary of UT with the theme "Becoming a life long learner, student, career, and success" by Andreas H.
- Facilitating the appointment of IKA-UT Jakarta.
- Joining a meeting to review the manuals for specially designed face-to-face tutorials (TTM-RK) for alumni.
- Holding a meeting to discuss TTM-RK plan and seminar plan for graduates.
- Giving some advice to graduates. Joining the UT Tutor Training. Informing a vacancy for Japanese Language Supervisor to IKA-UT Semarang, Jakarta, Lampung, and Surakarta



*One of the UT prominent alumni, Mrs Mooryati Sudibyo
at the AAOU Conference at Marina Beach, Ancol, Jakarta*

2003 period

In this year, IKA-UT central office conducted some activities such as the following.

- Making banners for the UT 20th Anniversary.
- Printing leaflets about IKA-UT

2004 period

This year IKA-UT central office conducted some activities such as the following.

- Offering a seminar proposal in the context of 2004 General Election (dated April 21, 2004 in Bali Rol Borobudur Hotel) with the theme "IKA-UT

Participation in Escorting 2004 General Election for Economic Growth and Jobless Solution".

- Joining the meeting for establishing and inaugurating the board members of the Indonesian Distance Education Profession Association (APJJI).
- Printing leaflets about IKA-UT for socialization.
- Making banners for the UT 20th Anniversary
- Socializing by cooperating with PT Indotama Mandiri Perkasa for the publication of the UT 20th Anniversary in Media Indonesia Newspaper.
- Making announcements through TVRI in the form of running text about IKA-UT informing all UT graduates to join the UT Alumni Association in the UT Regional Office in Indonesia on Interactive Dialogue Program.

2005 period

This year IKA-UT central office conducted some activities such as the following.

- Making a proposal for One Day Seminar to the Minister of Internal Affairs about "Direct Election for the Heads of Regional Districts: A Mandate to Reform towards Establishment of Democracy".
- Attending APJJI board meeting.
- Making banners.
- Congratulating graduates in UT and inaugurating the 2005 APPJJI board members.
- Acting as the Committee of One-Day Seminar at Kartika Chandra Hotel about "Distance Education System in Indonesia".
- Conducting Talk Show Komunika UT-TVRI episode 2 about "Indonesian Economy".

2006 period

This year IKA-UT conducted the following activities.

Acting as resource person in a seminar at UT graduation ceremony.

- Socializing UT to schools, government and private institutions.
- Inaugurating the board members of UT alumni association for Jakarta Area
- Consolidating the organization to Palembang, Surabaya, Kalimantan, and Bengkulu.

The increasing number of the UT alumni is described in Table 17 of the Attachment.

Development of Universitas Terbuka's Regional Offices

ASNAH SAID

Introduction

This chapter was based on articles written by some of Heads of Regional Offices, references, and Letters of Decision (*Surat Keputusan* or SK for short) available at UT's Head Office. In addition, this article was also written based on a discussion and in-depth interview with the first Rector of UT, Dr. Setijadi (2006), who had given many important inputs. The content of this article was selected based on substantial information related to the progress of UT's Regional Offices. In general, Regional Offices share some similar concepts, albeit some regional differences.

The preliminary draft of this article had been sent back to all Heads of Regional office to get feedback and more accurate and complete data. Heads or

Regional Offices in Surabaya, Surakarta, Palembang, Bogor, Denpasar, Ambon and Batam gave favorable response and significant input to sharpen up the preliminary draft.

Development of Regional offices and UT's Policy

Deciding on the name of Regional offices

If Universitas Terbuka (UT) had been established based on Indonesian constitution, there would have not been any problem with decision on concept, structure of organization, and names. Sukhothai Thamthirat Open University (STOU) and United Kingdom Open University (UKOU) were both established based on constitution. With the highest laws in the hierarchy, the conceivers of both universities found no difficulties in making the concept of distance education into reality. This was not the case of Indonesia because establishment of a university was based on the Presidential Decree. There are three higher laws above presidential decree: national constitution, laws, and government regulation. The position of existing People's General Assembly's decision is even higher, but it is not relevant because it is not concerned with higher education implementation. Unfortunately, in 1982, when the concept of UT was formulated, there were no particular laws and regulations that suggest open or distance higher education. Consequently, UT was regarded as a normal university which should act upon regulations specified in Government Regulation on Higher Education.

Fortunately, both UT's academic conceivers and the presidential decree agreed upon establishment of units in regions to help UT Head Office provide

services to remote areas in the country, even though these units were not specified in the government regulation. Therefore, a gap should be found in the regulation in order to establish units in regions. Eventually, it was agreed that UT's regional units were equivalent to Technical Implementation Units (*Unit Pelaksana Teknis – UPT* for short).

Discussions were then directed toward the units' functions, their levels in bureaucracy (echelon), and their proper name. It was agreed that the main task of those units was to implement regulations and policies formulated by UT Head Office.

The name of the units should be the same with the common name used for *UPT*, that is, "unit". The term "center" or "institution" could not be used because those terms were for higher level of bureaucracy. A Head of a center is echelon 2, and a Head of institution is echelon 1b. The term "branch office" or "representative" could not be used either because the term "branch" denotes part of a university. So, the agreed name was *Unit Program Belajar Jarak Jauh* or *UPBJJ* for short.

So, the term "*UPBJJ*" was decided according to bureaucratic organizational structure, not according to UT's academic needs. In UT's academic concepts, *UPBJJs* should not be technical implementation units only, but also function as Learning Resource Units (*Unit Sumber Belajar – USB*). *USB* means more than mere implementation of decisions. *USB* is center for academic and administrative services which can help students solve their academic and administrative problems. Its academic domain should be wider because it is a students' learning resource that provides library service, tutorial, counseling, internet, and of course, academic administration services.

Changing the term *UPBJJ* into *USB* had never succeeded because it was not accommodated in Government Regulation on Higher Education. But the concept of *USB* continued to develop even though the name used was still

UPBJJ. Changing into *USB* was previously done by decentralizing some of academic administration processes, then followed by authorization to recruit students, administer tutorials, building mini library. It was planned that in time *USB* could be equipped with computers to be used by students.

UT had done some pioneering projects to find an ideal model of *USB*. One of them was *USB* and Student's Learning Center (*Pos Belajar Mahasiswa – PBM*). This model was established in Bandung, Semarang, Denpasar, Pontianak, Medan, Manado, and Jayapura. This project was partly financed by the cooperation among UT, Open Learning Agency (OLA), and CIDA Canada. In early 1987, the centralized service was changed into decentralized service. It means that the tasks that were previously carried out by UT's Head Office were shifted to *UPBJJ*. At that time, UT Rector started to use the term *USB* for *UPBJJ* (Setijadi, 1992). At the same time, the Senate also discussed and formulated a draft of Ministerial Decree on Distance Education to be submitted to the Minister of National Education. It was mentioned in one article that the term *UPBJJ* should be changed into *USB*. The draft was then became the Decree of Minister of National Education No. 0564/U/1991 on Distance Higher Education. According to Prof. Setijadi (1992), changing *UPBJJ* to *USB* was based on the decree. UT's statute was then formulated based on the decree. In UT's statute No. 0470/)/1992, it was stated that UT had academic implementation components in regions, that is, *Unit Sumber Belajar (USB)*.

UT's next development showed that the term *USB* was only use for several years, because in the Decree of Minister of National Education No. 0168/O/1995, article 83 on UT's Organization and Work System, the term *UPBJJ* was still used instead of *USB*. At that time, the concept of *USB* continued to develop even though the term used was *UPBJJ*. In this case, the decentralization of registration that authorized to *UPBJJ* could speed up the process of registration

or provision of learning materials, which all could be done in several days. Therefore, students' learning process could be started immediately.

Afterward, decentralization of other authorities followed, so in 2005 *UPBJJ* developed into almost-perfect *USB*. To change *UPBJJ* into perfect *USB*, some computers are needed so that students can use them for administrative and learning purposes. With online computers, access to electronic tutorials, services of registration, examinations, academic administration, information, and other services can be developed at *UPBJJs*. With the availability of online facilities, the distance will no longer be a constraint, assuming that UT's students have access to internet. It is expected that an online system can gradually change *UPBJJs* into perfect *USBs*, so that all services can be provided.





The national workshop for the preparation of the management of UPBJJ, August 1984

Selecting Supervisors for *UPBJJ*

Before UT was established in 1984, a meeting of rectors from all over Indonesia was held, and the Minister of Education and Culture requested that all rectors of state universities help UT develop *UPBJJ* by providing the facilities needed, especially office buildings and staffs. The request for UT's *UPBJJ* supervisors was expressed by Prof. Setijadi (2006), which was accepted and formally realized in the Decree of Minister of Education and Culture No. 0389/O/1984 on Organization and Work System. Chapter 101, article 2, in the decree specified that *UPBJJ* supervision was technically done by rectors of local state universities/institutes. So, all rectors of state universities helped UT to develop *UPBJJ* by providing supervisors. For that purpose, the Minister of Education and Culture issued Ministerial Decree No. 0443/P/1986 on Supervisors for *UPBJJ* (Annex 3). The decree was applicable since the date of issuance (7 July 1986) and was retroactive to 18 October 1984 for all *UPBJJs* except *UPPBJ-Bogor*, which was retroactive to 7 June 1985, and *UPBJJ-Purwokerto*, which was retroactive to 7 June 1985.



A few *UPBJJs*, like *UPBJJ* Surabaya and *UPBJJ* Bandung, have three supervisors. There are *UPBJJs* that have two supervisors, while others have only one supervisor. *UPBJJ* Surabaya has three supervisors, namely Rector of Universitas Airlangga, Rector of IKIP Surabaya, and Rector of Universitas Teknologi 10 November Surabaya. *UPBJJ* Bandung has three supervisors, namely Rector of Universitas Padjadjaran, Rector of Institut Teknologi Bandung, and Rector of IKIP Bandung. *UPBJJ* Yogyakarta has two supervisors: Rector of Universitas Gajah Mada and Rector of IKIP Yogyakarta. *UPBJJ* Semarang has two supervisors: Rector of Universitas Diponegoro and Rector of IKIP Semarang. *UPBJJ* Malang has two supervisors: Rector of Universitas Brawijaya and Rector of IKIP Malang. *UPBJJ* Ujungpandang has two supervisors: Rector of Universitas Hasannudin and Rector of IKIP Ujung Pandang. *UPBJJ* Manado has two

supervisors: Rector of Universitas Sam Ratulangi and Rector of IKIP Manado. *UPBJJ* Medan has two supervisors: Rector of Universitas Sumatera Utara and Rector of IKIP Medan. *UPBJJ* Padang has two supervisors: Rector of Universitas Andalas and Rector of IKIP Padang. *UPBJJ* Jakarta has two supervisors: Rector of Universitas Indonesia and Rector of IKIP Jakarta. Supervisor for *UPBJJ* Bogor is the Head of Education and Culture Office of West Java Province because the Rector of Institut Pertanian Bogor did not support distance education system. As there was no university in Dili, supervisor for *UPBJJ* Dili was the Governor of Timor Timur (now Timor Leste).

When this article was written, a Head of *UPBJJ* was recommended by the supervising rector. In each capital of province – and other cities where there was a university – an *UPBJJ* was established as a technical implementation unit and was responsible to the Rector of UT. In carrying out the tasks, a Head of *UPBJJ* coordinated and cooperated with leaders of local universities. *UPBJJ* was responsible for carrying out face-to-face learning programs, implementing distance trainings for tutors, providing learning and academic administration services, distributing learning materials to students, administering examinations and practices, sending test results to students, giving out certificates, and facilitating student activities. In general, all Head Office's and *UPBJJ*'s tasks could be done by staff at *UPBJJ*. Because they were supported by operational guidelines which were made as simple as possible to make it easy for staff to provide services to UT's students.

Concept of *UPBJJ* and UT's policies

From year to year, UT keeps improving its management system. The responsibility in running *UPBJJ*, which was previously in a hand of a few leaders, is now shared among more *UPBJJ*'s staff.

In some circumstances, UT has to make a quick decision. The decision is made in a more participative way. This concept needs open and harmonious cooperation to make it transparent. The concept is decided together in a serious discussion by leaders at the Head Office and Heads of *UPBJJ*. The concept is formulated according to UT's basic structure and its operational system.

The future operational system is more flexible than the previous one, even though its implementation is sometimes more difficult than the previous one. Registration and distribution of learning materials, which were the problems faced in the previous system, will be handled by *UPBJJ* in the future. By changing the service system into decentralized form, registration and distribution of learning materials can be done in a short time.

The basic concept and policy of *USB* will be applied to *UPBJJ*. Some policies about *USB* to be applied to *UPBJJ* are as follow: *UPBJJ* can develop its own units independently without help from Head Office by making use of facilities available in the region. To carry out its tasks, *UPBJJ* can have technical support facilities for the implementation of education and learning, research, and community service, such as laboratory/studio and library. *UPBJJ* can set up student learning centers or expands its operational areas to make it easy to provide services to students. *UPBJJ* will be granted autonomy to manage student in an area with the fund provided by UT Head Office. The budget for *UPBJJ* will be based on number of students and problems of communication in the region. At the beginning of each semester, admission will be done in form of study orientation at *UPBJJ*. Final examination and Final Assignment will be done strictly and under coordination of *UPBJJ*. Administration process will be delegated to *UPBJJ*. Afterward, UT Head Office will record and process student's data based on *UPBJJ*'s report. Learning materials will be sold at *UPBJJs*, bookshops, post offices, and other places.

Up to 2006, concept of *UPBJJ* and policies were of various forms due to unique local conditions in each *UPBJJ*. In 2001, UT proposed to change its Structure of Organization in order to meet the needs of distance education operational system. Through a long and serious process, the Minister of Education and Culture Decree No. 123/O/2004 on UT's Organization and Work System was issued on 6 October 2004. Chapter XII in the decree states that *UPBJJ* is technical implementation unit in distance education program administration under the auspices of UT Rector.

Role and Expansion of *UPBJJ*

Establishment of *UPBJJ*

At the beginning, UT had 32 *UPBJJ* scattered all over the country. At that time, there were 27 provinces in Indonesia. So, there were provinces with two or three *UPBJJs*. West Java had two *UPBJJs*: in Bandung and Bogor. East Java had three *UPBJJs*: in Surabaya, Malang and Jember. Consideration for the establishment of *UPBJJs* at capitals of province was existence of a university and potential number of students. Timor Timur, which was then still part of the Republic of Indonesia, was an exception. Following the separation of Timor Timur from the Republic of Indonesia in 1998, *UPBJJ* Dili was automatically closed down. So, the number of *UPBJJs* reduced to 31. The picture below shows the first inauguration of Heads of *UPBJJ*.



The Inauguration of the first Heads of *UPBJJs* at Senayan in 1984.

As UT has its own unique characteristics – which are different from conventional universities’ – it requires a specific operation system. Different characteristics and basic principles of distance higher education institutions, in terms of learning process and management, require strong coordination. UT has a complicated management system because it relies on cooperation with many parties scattered all over the country. Cooperation is very important for students’ learning process because if it does not work properly, the process will be thwarted. Therefore, to smooth up the operation, representatives in the regions are needed to help provide services to students living all over the country. UT would not be able to provide optimal services without help from regional

representatives. Therefore, it requires units to help UT provide services to its students. It is the main characteristic that differentiates UT from other universities.

UT relies on cooperation network in regions under the coordination of *UPBJJs*. All students' service main activities – such as registration, distribution of learning materials, examinations, academic support, and distribution of certificates – are carried out at *UPBJJs*. In carrying out those activities, Heads of *UPBJJs* refer to policies, manuals, and technical guidelines provided by the Head Office.

Conditions at UT Head Office will influence *UPBJJs*, and vice versa. Therefore, the role and position of *UPBJJs* are very important for the success of UT management. The role of *UPBJJs* is so important that they have to be developed into real *USBs*, in order to achieve UT's vision and mission in 2010 and 2020.

Expansion of *UPBJJ*

In order to provide services to students in new provinces, *UPBJJs* had to be expanded. Up to 2006, the number of *UPBJJs* had increased to 37, scattered in 33 provinces. Expansion of *UPBJJ*'s areas was meant to improve the quality of human resources and to expand service network for students all over the country. Therefore, new *UPBJJs* had to be established.

Chronologically, the process of changing number of *UPBBJ* is as follow:

Based on the meeting between all Heads of *UPBJJ* in East Java, management area of *UPBJJ* Jember, Malang and Surabaya had to be reviewed. District of Lumajang was then added to *UPBJJ* Jember's area. Additional area for *UPBJJ* Malang was Pacitan district, and reducing the area of Lumajang district. Instead of adding another area, Pacitan district was removed for *UPBBJ*

Surabaya. This decision was specified in UT Rector's Letter of Decision No. 100/PT45/1992 on 24 August 1992. Since then, *UPBJJ* of Jember, Malang and Surabaya have management areas as specified in the Letter of Decision.

At the beginning of UT's establishment, Palembang had 2 cities and 8 districts, including Bangka Belitung. Due to the implementation of regional autonomy, in 2002 Bangka Belitung became a new province. In order to improve quality of services to students in the region, areas of management had to be expanded. *UPBJJ* Palembang's area had to be reorganized for the sake of equality of areas for each *UPBJJ*. Through Rector's Letter of Decision No. 176/J31/KEP/2002, *UPBJJ* Pangkal Pinang was established in 2002.

Several years later, in order to improve quality of services to students in the regions, equal distribution of working areas had to be made for *UPBJJ*, so the existing areas had to be reorganized. Through Rector's Letter of Decision No. 691/J31/KEP/2005 on 11 July 2005, working areas for *UPBJJ* Palembang and *UPBJJ* Pangkal Pinang were reorganized. Areas of *UPBJJ* Palembang include city of Palembang, districts of Ogan Komering Ulu, Ogan Komering Ulu Selatan, Ogan Komering Ulu Timur, Ogan Komering Ilir, kabupaten Ogan Ilir, Musi Banyuasin, Banyuasin, Lahat, city of Pagaralam, Musi Rawas district, city of Lubuk Linggau, Muara Enim district, and city of Prabumulih. Areas of *UPBJJ* Pangkal Pinang include districts of Bangka Induk, Bangka Barat, Bangka Selatan, Bangka Tengah, Pangkalpinang, Belitung Induk, and Belitung Timur.

From 1984 to 1994, areas of *UPBJJ* Manado included 6 districts and 2 municipalities and 1 administrative town. Following the opening of land transportation to Luwuk-Banggai, its service areas had to be changed. Luwuk-Banggai district was shifted to *UPBJJ* Palu. In 2001, student services in district and city of Gorontalo were transferred to a new *UPBJJ*, namely *UPBJJ* Gorontalo. *UPBJJ* Gorontalo was established based on Rector's Letter of Decision No. 82/J31/KEP/2002.

Considering the long distance and transportation problem, student services at Pulau Gebe in North Maluku were shifted to *UPBJJ* Manado. The only transportation to Pulau Gebe was by sea which at times could be very rough. In addition, students living in smaller islands in the regions wanted that examinations and academic administration could be done in their place so that they did not have to cross the sea. Consequently, the service area of *UPBJJ* Manado became narrower but the level of difficulty in reaching students' learning centers remained the same because Sangihe and Talaud were still within the administration area of *UPBJJ* Manado.

Expansion of *UPBJJ*'s service areas were also beneficial to students because they could get service close to their place without having to cross the sea. The service areas of *UPBJJ* Manado include districts of Minahasa Induk, Minahasa Utara, Minahasa Selatan, Sangihe, Talaud, Bolaang Mangondouw, cities of Manado, Bitung, and Tomohon, while the service areas of *UPBJJ* Gorontalo include districts of Gorontalo, Pahuata, Bone Bolango, Bualemo, and city of Gorontalo. This division of areas was decided in Jakarta on 11 July 2005.

As West Java province was divided into West Java and Banten provinces, the service areas of *UPBJJ* Bandung and Bogor had to be reorganized. The service areas had to be equally distributed, hoping that students in Banten province could be served better. Therefore, it was decided to establish *UPBJJ* Serang in Banten province through Rector's Letter of Decision No. 316/J31/KEP/2003 on 30 September 2003. Consequently, the service areas of *UPBJJ* Bandung and Bogor had to be reorganized.

Through Rector's Letter of Decision No. 689/J31/KEP/2005, the service areas of *UPBJJ* Bandung, Bogor, and Serang were decided. The service areas of *UPBJJ* Bandung include district of Bandung, city of Bandung, city of Cimahi, districts of Sumedang, Purwakarta, Karawang, Subang, Bekasi, city of Bekasi, districts of Indramayu, Majalengka, Cirebon, city of Cirebon, districts of

Kuningan, Garut Tasikmalaya, city of Tasikmalaya, district of Ciamis, and city of Banjar. The service areas of *UPBJJ* Bogor include districts of Bogor, Sukabumi, Cianjur, city of Bogor, Sukabumi and Depok; while the service areas of *UPBJJ* Serang include districts of Serang, Pandeglang, Lebak, Tangerang, cities of Tangerang and Cilegon.

Based on the amendment of Law No. 6 of 2000 and amendment of Law No 46 of 1999, the province of North Maluku was established. With the establishment of North Maluku province and the application of regional autonomy since 1 January 2001, *UPBJJ* Ambon found difficulties to operate in North Maluku. Therefore, the service areas of *UPBJJ* Ambon had to be reorganized. In the meeting between Vice Rector IV and Head of General Administration and Finance Bureau with Governor of Maluku on 27 August 2003, it was decided to establish *UPBJJ* Ternate. For that purpose, UT issued Rector's Letter of Decision No. 478/J31/KEP/2003 on 2 December 2003 on establishment of *UPBJJ* Ternate, with the address at Jalan Sultan Khairun No 1, Kelurahan Makassar, Ternate, Maluku Utara. Next, UT issued Rector's Letter of Decision No. 687/J31/KEP/2005 on division of service areas of *UPBJJ* Ambon and Ternate.

The service areas of *UPBJJ* Ambon include districts of Maluku Tenggara, Maluku Tenggara Barat, Pulau-pulau Aru, Maluku Tengah, Pulau Buru, Seram bagian Barat, Seram Bagian Timur, and city of Ambon; while the service areas of *UPBJJ* Ternate include districts of Halmahera Timur, Halmahera Tengah, Halmahera Selatan, Halmahera Utara, Halmahera Barat, Sula islands, city of Ternate, and Tidore Kepulauan.

The service areas of *UPBJJ* Pekanbaru had to be reorganized also. UT Rector decided to establish *UPBJJ* Batam whose area previously belonged to *UPBJJ* Pekanbaru. The decision was formalized through Rector's Letter of Decision No. 043/J31/KEP/2005. The service areas of *UPBJJ* Pekanbaru and Batam were formalized through Rector's Letter of Decision No.

688/J31/KEP/2005 on 11 July 2005. The service areas of *UPBJJ* Pekanbaru include city of Pekanbaru, districts of Palalawan, Kampar, Indragiri Hilir, Siak, Bengkalis, Rokan Hulu, Rokan Hilir, Kuantan Singingi, and city of Dumai. The service areas of *UPBJJ* Batam include cities of Batam, Tanjungpinang, districts of Kepulauan Riau (Kepri), Karimun, Lingga, and Natuna.

The establishment of West Sulawesi province had led to expansion of service areas of *UPBJJ*. As had been observed, Majene was one of developing areas in West Sulawesi province so the quality of its human resources had to be improved through higher education. Based on rector's instruction dated 15 March 2006, *UPBJJ* Makassar had to be expanded. It was done by establishing *UPBJJ* Majene through Rector's Letter of Decision No. 629/J31/KEP/2006 on 29 March 2006.

Before the establishment of *UPBJJ* Majene, there was a meeting on 2 May 2006 to decide on service areas of South Sulawesi and West Sulawesi provinces. The service areas of *UPBJJ* Makassar and Majene had to be decided. On 23 May 2006, Rector's Letter of Decision No. 2585/J31/KEP/2006 was issued. The service areas of *UPBJJ* Makassar include districts of Selayar, Bulukumba, Bantaeng, Jeneponto, Takalar, Gowa, Sinyai, Bone, Maros, Pangkajene, Barru, Soppeng, Wajo, Sid. Rappang, Pinrang, Enrekang, Luwu, Tana Toraja, Makassar, Luwu Utara, city of Makassar, and Pare-pare, while the service areas of *UPBJJ* Majene include districts of Mamasa, Majene, Mamuju, Polewali Mandar, and Mamuju Utara.

Division of regions covered by *UPBJJ* – as stipulated in the Decree of UT Rector – includes the sub-districts under the respective districts/city. The following map shows how *UPBJJs* are distributed / located, following the expansion.



Location of UPBJJ, following the expansion

Main Tasks and Functions of *UPBJJ*

Based of Rector's Letter of Decision in 2001 on tasks, functions, and structure of *UPBJJs*, the existence of *UPBJJs* has been changed to fit the concept of *USB*. All activities in regions are carried out by *UPBJJs* as frontline implementing units. Its position has made *UPBJJs* develop. *UPBJJ* is the center of service provision that can reach the students. According to Head of *UPBJJ* Surabaya, Dr. Kisyani Laksono, the main task and function of *UPBJJs* is to carry out almost all UT's tasks and functions. Extended role, task and function of *UPBJJs* as UT's regional representatives can be seen from the increasing number of activities carried out at *UPBJJs*. Therefore, to run the programs, *UPBJJs* should always implement the vision and mission of UT simultaneously. UT's vision and missions are directed toward developing the following three main

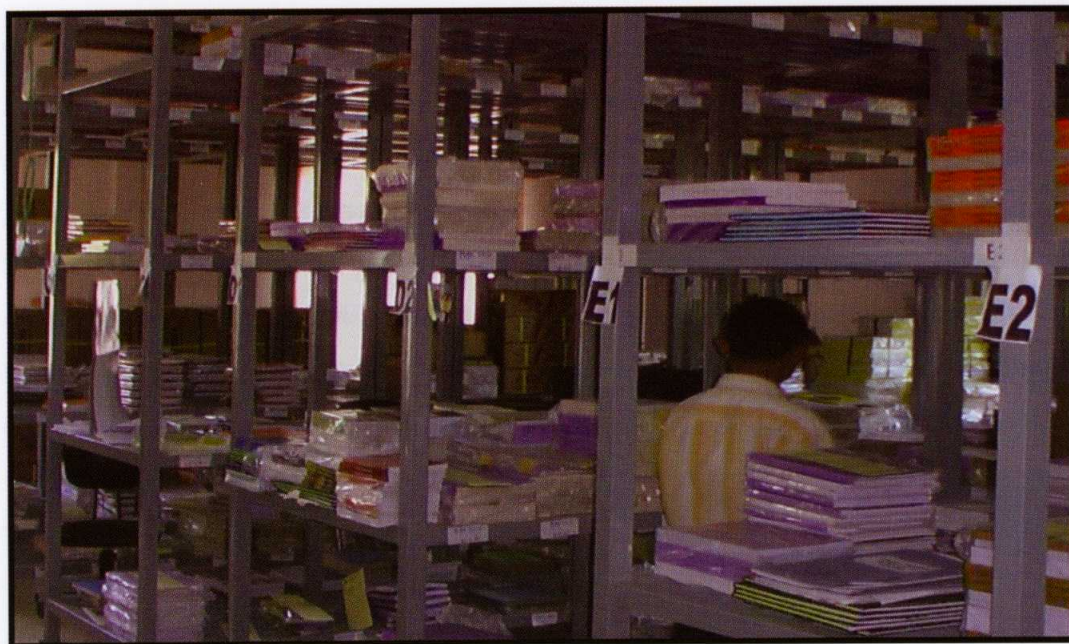
focuses: (1) Improvement of Academic Quality, (2) Improvement of Student Participation, and (3) Improvement of Internal Management. As implementing units, *UPBJJs* have the following main tasks and functions:

Academic Quality Improvement

1) Managing Learning Materials and Supporting Materials

The main tasks and functions of *UPBJJs* include management of the distribution of learning materials and other supporting materials, from prediction of demands for each semester based on trend of number of students to submission of revenues the sales of learning materials and other supporting materials. *UPBJJs* are responsible for providing learning materials and other supporting materials to be sold and distributed to the students. The learning materials and other supporting materials managed by *UPBJJs* include printed learning materials (such as main textbooks, supplementary books, practice manuals, and references) and non-printed materials (include audio and video recordings, computer-assisted learning materials in diskettes, CDs, or audiographic).

UPBJJs use computers to maintain the accuracy of data of the learning materials and their supporting materials, and also its financial administration. They make sales reports of learning materials and other supporting materials each month. UT Head Office checks the accuracy of the reports by keeping records of materials each year. With regard to facilities, a handful of *UPBJJs* are still without adequate storeroom. From time to time, UT strives to perfect the storeroom for learning materials and other supporting materials.



Warehouse for storing Learning Materials at *UPBJJ* Surabaya

Because of good cooperation and coordination between UT Head Office and *UPBJJs*, recognition for quality management in the area of learning materials service has been realized. On 14 March 2006 UT was awarded ISO Certificate 9001-2000 by SAI Global Australia. The picture below shows the storeroom of learning materials at *UPBJJ* Surabaya.

2) Academic Counseling and Practice

One of learning processes or academic counseling managed by *UPBJJs* is group and independent – or self-learning – activities. Self-learning is a process of interaction between students and learning materials without help from teachers, done individually or in group. Assignments are in form of homework related students' experience in completing the material individually or in group. *UPBJJs* provide academic counseling and coordinate the implementation of self- or group assignments.

Practice is a learning activity through observation, exercise, or investigation. Through this activity, students can get meaningful experience. Practice can be done inside or outside laboratory. Practice subjects are



Practicum conducted by Students of Basic Education Program 2006.2 at a study group in Pamekasan, Surabaya

compulsory for all students of Biology, Chemistry, and Physics in the Faculty of Education (FKIP-UT). Practices are designed to be done independently by students under supervision from lecturers appointed by the UPBJJs. The students do the practices either individually or in group.

In general, almost all UPBJJs do not have their own laboratory. Practice is carried out by using science kits, which are rarely used due to limited number of academic staff. Therefore, there should a way to solve this problem, that is, by cooperation with Supervising Universities and District / Municipal Education Offices to determine the place for practice and to recruit instructors and supervisors. UPBJJ's tasks are to

register the students to do practice, to make announcement about it, to set the fee, to make schedule, monitor its implementation, to maintain the quality of the practice, to make a report about the activity, and to keep the record of the activity.

Beside practice subjects, Teaching Competence Improvement (*Pemantapan Kemampuan Mengajar* – PKM for short) and Professional Competence

Improvement (*Pemantapan Kemampuan Professional* – PKP) are also compulsory subjects for all study programs at the Faculty of Education (FKIP-UT). The purpose of this subject is to enhance students' ability in designing, implementing, evaluating, and improving learning activities in classroom. All competences that students gain from various subjects should be applied in PKM and PKP. To ensure the implementation of high-quality practice, PKM and PKP exams, student counseling in report writing, a school or place is needed for the activity. Therefore, UT needs to have centers for practices, PKM and PKP. According to data from Development Team of Practice Implementation System from all *UPBJJs*, there are 114 centers of practice: 89 are at high schools and 26 are at universities and 5 in other places. Students can see the address of practice centers in UT Catalogue.

3) Implementation of Tutorial

Tutorial is an academic service and counseling provided for students, individually or in group. In tutorial, students meet face-to-face with tutors. In this meeting, students and tutors discuss learning materials.

Subjects to be tutored and prediction of number of students to attend should be decided before the implementation of tutorial. The decision on what subjects to be tutored should refer to tutorial manuals. How tutorial is implemented – starting from socialization and recruitment of students, planning, tutors recruitment, the action of tutorial itself, up to the monitoring and evaluation of the implementation of the tutorials – is the responsibility of Faculties and *UPBJJs*. For basic education, monitoring and evaluation are carried out by District/Municipal Office of Education. A successful tutorial can be measured by some important aspects: the availability of facilities, student's attendance, tutor's attendance, competence and quality of tutor, quality of

assignments, service and other relevant aspects. Information about these aspects is gained from direct observation, interviews, and questionnaires.

In the first eight years of UT's operation, not many students followed the tutorials provided by UT. At that time, tutorials were considered having no significant contributions to students' final grades. Therefore, students paid no attention to the tutorials. But starting 2001, tutorials were again initiated in the form of face-to-Face tutorials specially designed for PGSD programs (teacher training programs for elementary school teachers). This time, the tutorial contributes 30% to students' final grade. Its special characteristic is reflected in its administration, tutor recruitment, place of tutorial, fees, number of meetings, assignments, calculation of assignment scores and final scores.

Since 2004, tutorials have been provided for 3 subjects for basic education (*Pendidikan Dasar*, or *Pendas* for short) and non-basic education (*Non-Pendas*). The tutorials are offered by *UPBJJs*, but they are not compulsory for students to attend them. It means that students of *Pendas* and *Non-Pendas* do not have to attend tutorials but *UPBJJs* are required to provide them in case of students' demand. Students will pass if they score high in final exam, even though they did not attend tutorials. It is quite different from previous tutorials for *Pendas*, where students would not pass if they did not attend Tutorials, no matter how good their final score was.

Tutorials have been implemented in accordance with tutorial manuals as detailed in UT's Quality Assurance System. Since 2005, assessment of best tutorial implementation by *UPBBJs* has been done based on tutorial management and students' attendance. Best achievement was announced in National Coordination Meeting (*Rakornas*) in 2006. *UPBJJ* Bengkulu was the best, followed by *UPBJJ* Jakarta in the second place, and *UPBJJ* Banjarmasin in the third place.

4) Examination Administration



Examination in UPBJJ Bogor

The implementation of examination carried out by *UPBJJ* Jakarta, Bogor and Denpasar was the models of best practices among the existing 36 *UPBJJs* (Rakornas 2006). However, examinations administered by other *UPBJJs* were good and suited the local condition. The picture below shows the implementation of examination at *UPBJJ* Bogor.

Examinations are carried out in every capital of district/city. If the number of the students in a district/city is too small, the students should take the examination in another district/city together with other students. After registration has been closed, *UPBJJs* – in cooperation with District Office of Education – decides the locations for examinations and the invigilators. The invigilators are selected from schools and universities where the exams are to be administered in cooperation with Office of Education. Two weeks before the

exams, in a meeting with Registration and Exam Coordinator, a committee is formed to decide on the Person-in-Charge of Exam Premise (*Penanggung Jawab Tempat Ujian – PJTU*) and Person-in-Charge of Exam Location (*Penanggung Jawab Lokasi Ujian – PJLU*), in accordance with QA system manuals (*Simintas*).

With regard to exam committee, *UPBJJ* Bogor appoints one of its staffs to be the secretary of *PJLU*. The task of the secretary is to help *PJLU* in administration of examination in the location. A week before the exams, the committee arranges exam materials for twenty student for each room. Exam materials are prepared soon after they have been received from UT Head Office. The materials are submitted by Registration and Exam to *PJTU* in districts or cities outside *UPBJJ* Bogor one day before the exams. *PJTU* is responsible to take the materials to districts or cities where the exams are to take place. One hour before the exams, the materials are submitted by Registration and Exam Coordinator to *PJTU/PJLU* in the locations designated by *UPBJJ* Bogor.

For new students, two or three days before the exams, *UPBJJs* carry out Study Orientation (*Orientasi Studi Mahasiswa Baru – OSMB*) to remind them of exam regulations and ways to fill in the answer sheets (*Lembar Jawaban Ujian – LJU*). Each exam location is monitored by Head of *UPBJJ* and Head of Sub-Unit of Administration. Implementation of examination is concluded by an evaluation by the Exam Committee. Afterward, *UPBJJs* send the results and report of exam implementation to UT's Head Office.

Other tasks of *UPBJJs* are to evaluate self-assignment (*Tugas Mandiri – TM*), practice assignments, tutorial assignments, PKM, PKP, final examinations, and end-of program assignments. Other tasks are to check the results of *TM* and send them to exam centre at Head Office (*TM* has been removed since 2006).

Marking objective tests is done by computer at UT Head Office to make it faster. However, manual marking of essays by academic staff posed certain problems due to huge number of students yet limited number of staff. It caused

delay to announcement of test results. In order to speed up the release of test results, UT has transferred marking of essays which was previously done at the faculties to *UPBJJs*. This transfer was expected to speed up marking.



Scoring examination papers at UPBJJ Surabaya

Marking of essays has been piloted for 2005.1 registration period at certain *UPBJJs*, called *UPBJJ-Sentra*. The rest is called *UPBJJ-Jangkauan*. *UPBJJ-Sentras* were selected based on criteria set by a team. The selected *UPBJJ-Sentras* are *UPBJJ* Medan, Palembang, Yogyakarta, Surabaya, Jakarta, and Makas-sar. A photo of marking essays at *UPBJJ-Sentra* Surabaya can be found on page 135.

5) Submission of certificates

Certificate is the recognition of a student's success in completing a program. The function of an UPBJJ is to help the administration and submission of certificates and transcripts.



Official ceremony of conferring certificates of Diploma and Graduate degree at UPBJJ Gorontalo

Increasing the number of Student Participation

1) Registration

One of UPBJJ's functions is to do recruitment and registration of students in its service areas, both for basic education programs and non-basic education ones. After recruitment, UPBJJ's next task is to register students recruited for each registration period. Registration is a process of recording student's data:

personal data, subject taken, tuition fee, and exam location. Registration implemented by *UPBJJ* Bogor, Palembang, and Surakarta constitutes a model of best practice in 2005. The plan now is to propose it to get ISO in management. (Rakornas, 2006)

Student registration at UT is divided into three categories: first registration for freshmen, subject registration for active students taking certain subjects for certain registration period, and exam registration and registration for final assignment for first degree students eligible to do final assignment. Systems of recruitment and registration, requirements, schedule, and procedures can be found in UT Catalogue and in Management Manuals for each program and QA system manuals.

All students have to register at *UPBJJs*. Student data are recorded by registration staff. The accuracy of data is important for smooth learning process and other academic activities. Therefore, *UPBJJs* are required to do recruitment and registration as accurate as possible.

2) Cooperation and Promotion

UPBJJs are well aware that increasing the number of students will lead to increasing revenue. So, in order to increase the number of students, *UPBJJs* should cooperate with other institutions in their service areas. The purpose of cooperation is to widen the scope of service and to mutually utilize available resources. Therefore, Rector of UT authorizes Heads of *UPBJJ* to do the following: (1) signing cooperation agreement with Bupati/Mayor to improve the quality of elementary school teachers, (2) sending letters to anybody in his area without having to ask Rector's consent, as long it does not exceed his authority, (3) proposing cooperation with partner universities.



Melalui UPBJJ Gorontalo, Gubernur Gorontalo dan Rektor UT mengadakan kerja sama

Based on the experience gained by *UPBJJ* Bandung in cooperating with other institutions, there are two indicators of achievement: timely provision of learning materials and implementation of tutorials that caters for students' needs. Out of existing 37 *UPBJJs*, *UPBJJ* Mataram, Bandung, and Palembang are the best practices in partnership and cooperation (Rakornas 2006). Apart from two indicators, partnership should be developed by mainstreaming quality of academic programs, quality of services, expansion of service areas, improvement of student participation, and improvement of human resources quality.

In order to promote programs offered by UT, *UPBJJs* carry out promotion to districts in cooperation with Education Office and local government. Current cooperation have been with state and private universities, especially in providing tutors and academic counselors, module writers and item writers, and item

markers. In addition to that, *UPBJJs* also disseminate information about UT to the community through Q-Channel, TV-Edukasi, TVRI and local radio stations. Cooperation with BRI is done for payment of tuition fees, learning materials, registration, credit transfer, and transcripts. Cooperation with PT Pos is for distribution of exam materials and other materials. UT also cooperates with Provincial governments, Department of Agriculture, BKKBN, TNI, Department of Religious Affairs, and other departments.

UPBJJs have made some initiatives to promote UT, such as sending brochures to high schools and related institutions, and promotion in mass media. In student activities, *UPBJJs* have been functioning as facilitators for co-curricular and extra-curricular so that students can participate in intellectual activities, such as discussion, seminars, and scientific competitions. Other student activities, such as Study Orientation, have been done at almost all *UPBJJs*. *UPBJJ* Yogyakarta is the initiator and the first organizer of *Pekan Disperseni*. The first *Disperseni* took place in Kaliurang in 1991 and *UPBJJ* Yogyakarta was the winner. In 1996, *Disperseni* was held at *UPBJJ* Bandung, and in 2002 at *UPBJJ* Surabaya for Java, Bali, Nusa Tenggara, and Kalimantan regions. The next *Disperseni* took place from 2-6 August 2005 at *UPBJJ* Pontianak for Central Region, in which 16 *UPBJJs* took part.

National Student Week (*Pekan Mahasiswa Nasional – PIMNAS*) 2005 taking place at Universitas Andalas, Padang, from 12-15 July 2005 was also attended by UT's students. Five UT's students participated in scientific writing competition. The winner of this competition would join the national competition in 2006.

The pictures below show the situation during *Disperseni* at *UPBJJ* Surabaya.



Opening ceremony of *Disperseni* at UPBJJ Surabaya



3) Development of UT's Students per *UPBJJ* from 1984 to 2006

Development of *Pendas* and *Non-Pendas* students per *UPBJJ* can be found in Annex 4.

Improvement of Internal Management

1) National Coordination Meeting (*Rakornas*)

The Development and improvement of internal management are the key factor for successful UT's programs. A Big number of *UPBJJs* and their image as an internationally-recognized distance higher education institution require effective coordination. One way for effective coordination between units at UT Head Office with *UPBJJs* is to hold routine National Coordination Meeting (*Rakornas*). Since UT's establishment in 1984, *Rakornas* has been held every year, attended by all unit leaders of UT Head Office (echelon I, II and III), Heads of *UPBJJ*, Coordinators and Heads of Administration Sub-Unit of *UPBJJ* from all over Indonesia, Head of Directorate General of Improvement of Teachers and Educational Staff (*Ditjen Peningkatan Mutu Pendidik dan Tenaga Kependidikan*) of the Ministry of Education.

The purpose of *Rakornas* is to perfect UT management system in order to support essential services for students. In the meeting, participants can share the same perception, express their concerns about problems, share information and learn from each other. In addition, *Rakornas* is a means of coordination, integration and synchronization of main tasks and functions (*Tupoksi*) and Action Plans. One *Rakornas*' theme related to *UPBJJs* was the one held in 2005: "Improvement of Quality Standard of UT's Services through Restructuring and Revitalization of *UPBJJ* toward International Accreditation". Meanwhile, the purpose of *Rakornas* in 2006 was to improve quality of coordination between the

Head Office and the *UPBJJs* in program implementation and to share the perception to improve the quality of UT's services to get international accreditation through restructuring and revitalization of *UPBJJs*.

The main purpose of *UPBJJ* revitalization is to improve *UPBBJs*' performance so that *UPBJJs* can support the achievement of the UT's 2010 and 2020 vision and missions. The specific purpose of *UPBJJ* revitalization is to enable *UPBBJs* to have the same standard in providing essential service to students in terms of registration, examination, distribution of learning materials, implementation of administration and academic supports as well as cooperation with other institutions to improve student participation (*Rakornas* 2006)

Below are pictures showing *Rakornas* in 2006.





UT National Coordination Meeting, 2006

Apart from that, UT is now preparing for ISO Certificate 9001-2000 for management development in 11 *UPBJJs* (Jakarta, Bogor, Bandung, Semarang, Purwokerto, Yogyakarta, Surabaya, Malang, Palembang, Padang, dan Pontianak), with the purpose to assure management quality in implementing its activities. In 2006, UT started to apply Good Corporate Governance into Era of Global Competition. Basically, UT is striving for perfect implementation of education system and improvement of service quality. *Rakornas UT* in 2006 also facilitated a chance to share opinions about best practices among *UPBJJs* to get ISO in *UPBJJ* management. *UPBJJ* quality assurance is concerned with aspects of tutorial implementation, examinations, student recruitment, general management, and cooperation.

From 1984 to 2006, *Rakornas* had been done once a year. One of activities during *Rakornas* 2003 was assessment and award-giving for *UPBJJ* performance during the previous year. Starting from *Rakornas* in 2003, assessment of *UPBJJ* performance was conducted. The assessment was done to 31 *UPBJJs*. *UPBJJ* Gorontalo and Pangkal Pinang were not included in the assessment because their existence had not been one year. The Assessment Team chose three best *UPBJJs*, namely *UPBJJ* Bandung, Bogor, and Padang. In *Rakornas* 2004, the Assessment Team chose three best *UPBJJs*: *UPBJJ* Gorontalo, Pontianak, and Bandung. In *Rakornas* 2005, the Assessment Team chose three best *UPBJJs*: *UPBJJ* Surabaya, Semarang, and Palembang.

Tables 1 and 2 below present first-, second-, and third-rank *UPBJJs* in 2002, 2003, and 2004, based on the assessment of Assessment Team announced in *Rakornas* 2003, 2004, and 2005.

Table 1. List of UPBJJ–UT with outstanding achievement in 2002, 2003

Rank	2002	2003
1st	UPBJJ Bandung	UPBJJ Gorontalo
2nd	UPBJJ Bogor	UPBJJ Pontianak
3rd	UPBJJ Padang	UPBJJ Bandung

Source: Panitia Rakornas 2003 dan 2004

Tabel 2. List of UPBJJ–UT with outstanding achievement in 2004 (Tim Penilaian Rankornas 2005).

Cluster	Winner	UPBJJ	Cluster	Winner
General administration	I	Surabaya	Finance administration	UPBJJ Surabaya
	II	Semarang	Examinations Administration	UPBJJ Yogyakarta
	III	Palembang	Cooperation and students enrollment	UPBJJ Bandung
			ICT Implementation	UPBJJ Jakarta
			Tutorial Administration	UPBJJ Palembang

Source: Panitia Rakornas 2005

Meanwhile, *Rakornas* UT in 2006 announced the names of best performing *UPBJJs* in aspects of performance and implementation of distance education in their respective areas. Table 3 below presents *UPBJJs* with best performance based on the assessment of Assessment Team, announced in *Rakornas* 2006.

Table 3. List of UPBJJ–UT with outstanding achievement in 2005 (Tim Penilaian Rankornas 2006)..

Category	Winner	UPBJJ
General	I	Palembang
	II	Bandung
	III	Bogor
	Harapan I	Jakarta
	Harapan II	Surabaya
	Harapan III	Semarang

Category	Winner	UPBJJ
Partnership	I	Mataram
	II	Bandung
	III	Palembang

Category	Winner	UPBJJ
Tutorial	I	Bengkulu
	II	Jakarta
	III	Banjarmasin

Category	Winner	UPBJJ
Registration	I	Bogor
	II	Palembang
	III	Surakarta

Category	Winner	UPBJJ
Examination	I	Jakarta
	II	Bogor
	III	Denpasar

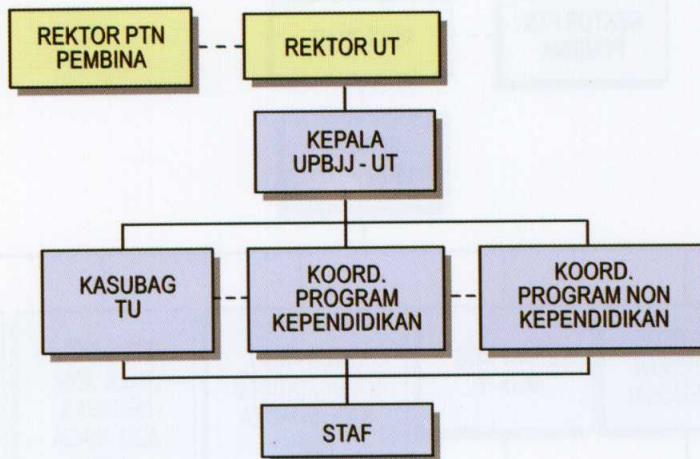
Source : Panitia Rakornas 2006

2) Development and Variations of UT's Structure of Organization

UT's organizational structure was formed based on Government Regulation (PP), Presidential Decree (*Keppres*), and Ministerial Decree (*Kepmen*) on higher education. Not all of them are entirely suitable to organizational structure needed for a distance higher education institution. Therefore, to get an effective and efficient UT's organizational structure, PP, Keppres and Kepmen for UT's organization should be supplemented by Rector's Letters of Decision on necessary additional units at UT. Regulations on UT's Organizational Structure should be simpler yet have strong legal bases and suitable to UT's needs. In November 2001, UT set up a team to make a better organizational structure which could be applicable to UT as a distance higher education institution. A new structure was proposed to be approved by the government.

Below is the description of development of UPBJJ's organizational structure. There have been three changes since 1984.

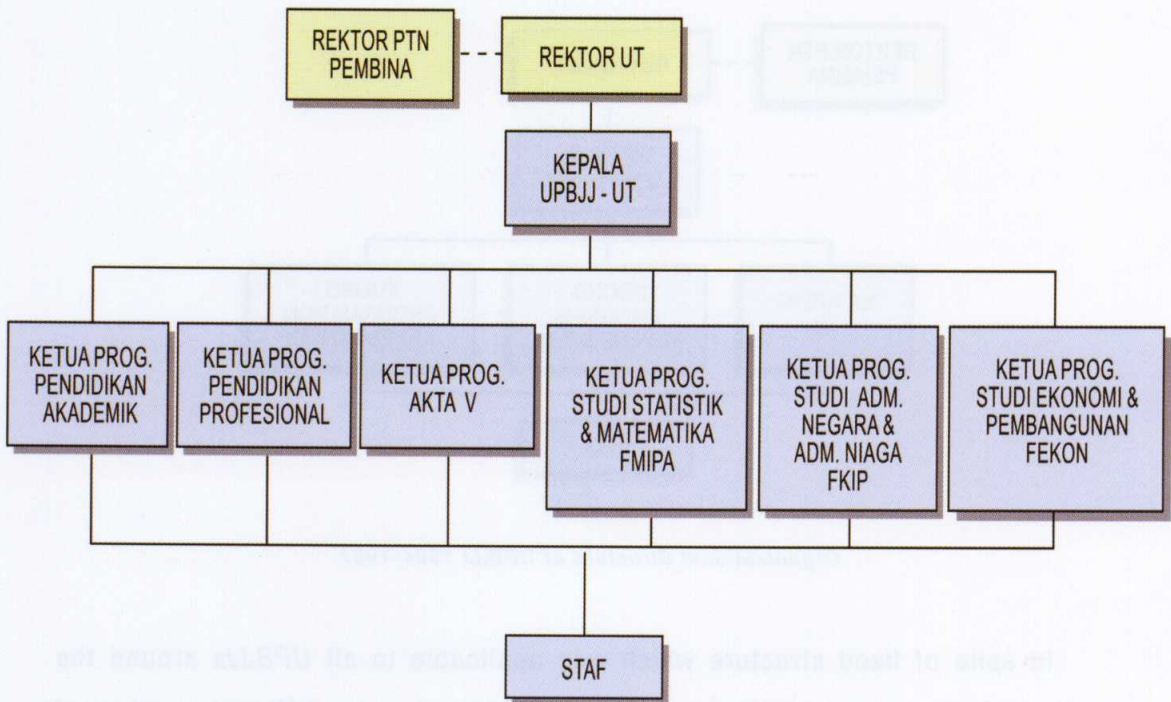
The structure of UPBBJ from 1984 to 1987 consisted of Head of *UPBJJ*, Head of Sub-Unit of Administration, Educational Program Coordinator, and Non-educational Program Coordinator. The structure can be seen in the following diagram.



Organizational Structure of UPBJJ 1984-1987

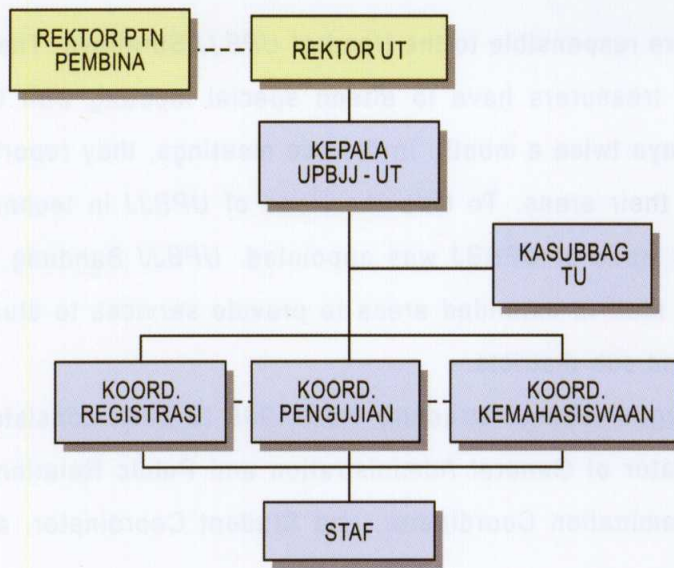
In spite of fixed structure which was applicable to all *UPBJJs* around the country, there were variations at some *UPBJJs*, due to different number of students. *UPBJJ* with bigger number of students developed a structure which suited their needs to provide fast and accurate service to students. *UPBJJ* Bandung, Surabaya and Padang, for example, in 1984 belonged to Type A. (Type A was the one with more than 10,000 students, Type B had 5,000 to 10,000 students, and Type C had less than 5,000 students). The structure consisted of Head of *UPBJJ*, Person-in-charge of Administration, Head of Academic Programs, Head of Professional Program, Head of *Akta V* Program (Teaching Certificate), Head of Statistics and Mathematics Program of Faculty of Mathematics and Natural Sciences, and Head of Economy and Development Program of Faculty of

Economy. The organizational structure in the three *UPBJJs* in 1984 can be seen in the following chart.



Organizational Structure of UPBJJ Bandung, Surabaya, dan Padang in 1984

UPBJJ's organizational structure from 1988 to 1994 – based on Minister of Education and Culture Decree No. 094/U/1993 issued on 27 February 1993 and Rector's Letter of Decision No. 022/PT/45/KEP/1994 issued on 4 April 1994 – consisted of Head of *UPBJJ*, Head of Sub-Unit of Administration, Registration Coordinator, Examination Coordinator, and Student Coordinator. The structure can be seen in the following chart.



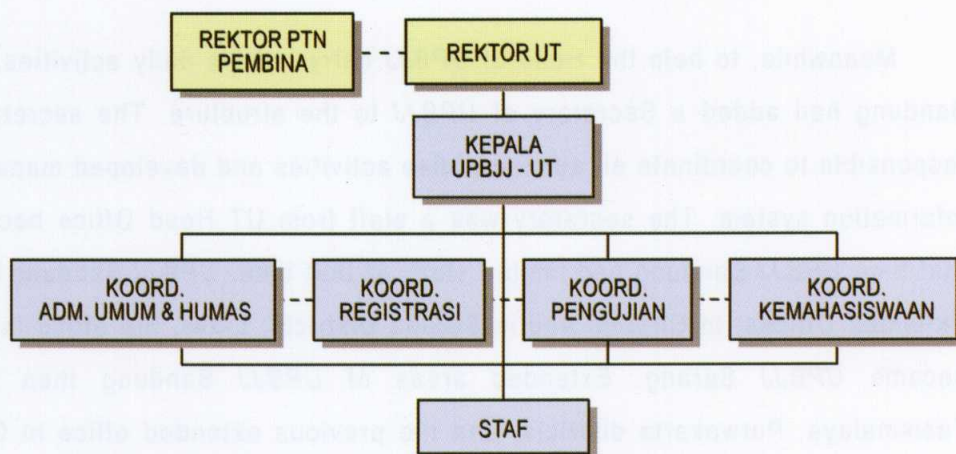
Organizational Structure of UPBJJ in 1988-1994

Meanwhile, to help the Head of *UPBJJ* carry out his daily activities, *UPBJJ* Bandung had added a Secretary of *UPBJJ* to the structure. The secretary was responsible to coordinate all administrative activities and developed management information system. The secretary was a staff from UT Head Office because at that time *UPBJJ* Bandung had limited staff. At that time, *UPBJJ* Bandung had two Extended Offices: in Cirebon and in Serang Districts. Later, the office in Serang became *UPBJJ* Serang. Extended areas of *UPBJJ* Bandung then became Tasikmalaya, Purwakarta districts, and the previous extended office in Cirebon. The three extended offices have the tasks of providing registration service, tutorials, and examinations.

UPBJJ Surabaya also developed its own organizational structure to fit the local conditions and provide better services to the students and the community. Now, *UPBJJ* Surabaya has additional staff: one Regional Coordinator, one Secretary, and one Treasurer in each of its extended offices in Pamekasan, Jombang and Madiun. In doing their tasks, the coordinators, the secretaries, and

the treasurers are responsible to the Head of *UPBJJ* Surabaya. The coordinators, secretaries and treasurers have to attend special meeting with Coordinator of *UPBJJ* in Surabaya twice a month. In the two meetings, they report the activities implemented in their areas. To help the Head of *UPBJJ* in technical works, an Assistant to the Head of *UPBBJ* was appointed. *UPBJJ* Bandung and Surabaya also place their staff in extended areas to provide services to students living in some districts and sub-districts.

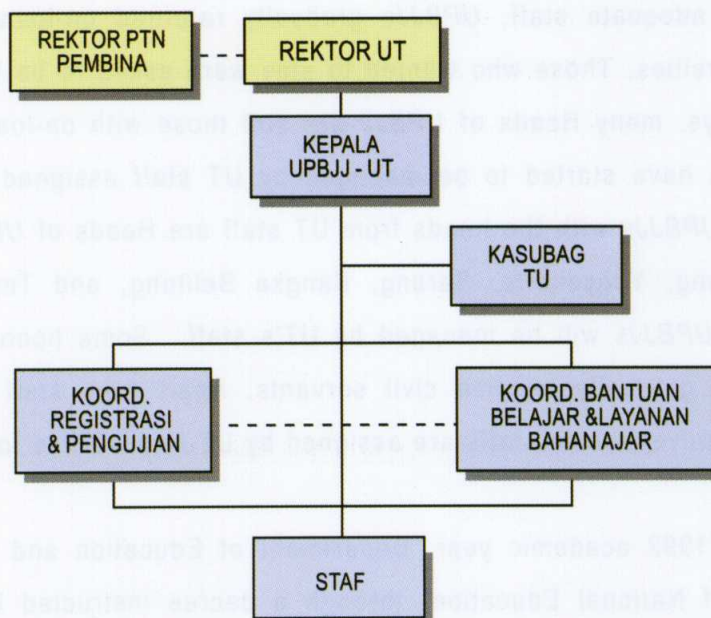
UPBJJ's organizational structure from 1995 to 2002 consisted of Head of *UPBJJ*, Coordinator of General Administration and Public Relation, Registration Coordinator, Examination Coordinator, and Student Coordinator, as seen in the following chart.



Organizational Structure of UPBJJ in 1994-2004

Since 2004, the applicable regulation has been the Minister of National Education Decree No. 123/O/2004 issued on 6 October 2004 on Universitas Terbuka's Organization and Work System. Thanks to the new Law of Education System (2003), which explicitly mentions distance education, UT's overall

structure of organization, including that of *UPBJJ*, can be different from conventional universities'. Since 2004 *UPBJJ*'s organizational structure has consisted of Head of *UPBJJ*, Head of Sub-Unit of Administration, Coordinator of Registration and Examination, and Coordinator of Learning Materials and Learning Supports. Based on the ministerial decree above, *UPBJJ*'s structure of organization is now as follow:



Organizational Structure of UPBJJ in 2004 – Today

Names of Heads of *UPBJJ* since 1984 can be found in Annex 5.

3) Development of Human Resource

At the beginning of UT's establishment in 1984, almost all *UPBJJs* received human resources support from partner universities. Some staffs from partner universities were on loan at *UPBJJs*, from Head of *UPBJJ* to staff. *UPBJJ* did not directly recruit people, except *UPBJJ* Bogor, which did not receive human resources assistance from partner universities, as *UPBJJ* Bogor was supervised

by West Java Education Office until 1991. Therefore, *UPBJJ* Bogor at that time recruited 5 staff consisting of 2 academic staff and 3 administration staff. The number of staff in each *UPBJJ* varied. The need for staff also varied according to the size of *UPBJJ* and the service areas. At the beginning, the number of staff at each *UPBJJ* ranged from 3 to 8.

As the number of students increased starting from the second year of UT's operation, UT Head Office recruited new staff for the *UPBJJs* almost every year. After having adequate staff, *UPBJJs* gradually returned on-loan staff to the partner universities. Those who wanted to stay were asked to be transferred to UT. Nowadays, many Heads of *UPBJJ* are still those with on-loan status, but some *UPBJJs* have started to be managed by UT staff assigned by UT Head Office. The *UPBJJs* with the heads from UT staff are Heads of *UPBJJ* Jakarta, Bogor, Bandung, Yogyakarta, Serang, Bangka Belitung, and Ternate. In the future, more *UPBJJs* will be managed by UT's staff. Some honorary staffs of *UPBJJs* have gradually become civil servants. Apart from staff recruited by *UPBJJs* themselves, some staffs are assigned by UT Head Office to be placed at *UPBJJs*.

In 1991/1992 academic year, Department of Education and Culture (now Department of National Education) through a decree instructed UT to accept around 500 former teachers of SPG and SGO to be academic staff at UT. They were assigned to work at *UPBJJs*, except those with S2 or S3 degrees whose qualifications were needed at UT Head Office. *UPBBJs* with extended areas like *UPBJJs* Bandung and Surabaya, and some other *UPBJJs*, assigned some of the new staff to extended areas with the same tasks as those at *UPBJJs*. *UPBJJ* Surabaya received 32 new academic staff. Regional coordinators selected from former teachers of SPG and SGO had their own offices at their areas.

Recruitment of these new staff posed certain problems to those *UPBJJ* with relatively small number of students and inadequate office facilities, as it

happened to *UPBJJ* Yogyakarta. *UPBJJ* Yogyakarta received 32 new academic staff from SPG Gunung Kidul, Wates and Bantul. At that time, the number of *UPBJJ* Yogyakarta's staff drastically increased to 49. As they had inadequate office facilities, the new academic staffs were assigned to be tutors for D-II PGSD Program. Their work schedule was arranged in such a way that they only had to be in the *UPBJJ* office twice a week.

Although the above decision was beneficial for UT in the long run (as UT could employ the transferred staff as tutors), it still posed certain problems. The big number of the former SPG/SGO teachers could not work at their maximum capacity. The help from the Personnel Bureau of Department of Education and Culture assisted UT in arranging the transfer, which took more than a year. Trainings for those former teachers were subsidized by Directorate General of Higher Education through its Training Center. Before they started working at UT, they were trained for a month in Sawangan, Bogor. They were introduced to the system of UT and equipped with basic skill to carry out their future tasks. Then, they were given a chance to get the second S-1 degrees, especially those whose educational background was not suitable with the study programs at UT.

The number *UPBJJ* staff varies from one *UPBJJ* to another due to the different needs and the number of staff sent from the Head Office. From time to time, the placement and training of staff are the major concern of UT. The purpose of staff placement and trainings is to equip them with different experiences and skills so that they will be able to provide quality services to students all over the country. The placement of staff according to their skills and improvement of their skills are done through orientation, apprenticeships, and rotation. Education and trainings are based on *UPBJJ*'s needs and may take form of further studies, apprenticeships, trainings, seminars, conferences, and courses. Therefore, UT Head Office provides periodic trainings for all *UPBJJ*'s

academic staff and administration staff. Number of administration and academic staff in each *UPBJJ* can be found in Annex 6.

4) Development of Facilities

At the beginning of UT's operation, *UPBJJ*'s office buildings were borrowed from partner universities (except *UPBBJ* Bogor which made use of an office building at *STM Negeri* Bogor), but for the *UPBJJs* set up after 2000, UT or its partners rent buildings for their offices. The building for *UPBJJ* Pangkal Pinang, for example, the Provincial Government rented a building for it for three years. It was a form of the Governor's (Drs Hudarni Rani) attention to efforts of quality improvement of human resources in the province. *UPBJJ* Gorontalo formerly occupied History Laboratory Building at IKIP Negeri Gorontalo. In a short time, on September 2003 *UPBJJ* Gorontalo built a 500 square meters office building on a 1.662 square meters land. The office was built by Gorontalo Governor's assistance – H. Fadel Mohammad. On 23 January 2004, *UPBBJ* Gorontalo was officially open, in commemoration of Gorontalo Patriot's Day.

Beside office buildings, *UPBBJs* also got modest equipment from partner universities, such as typewriters, tables, chairs and wooden cupboard. All *UPBJJs* set up at the beginning of UT's establishment used simple and manual facilities while new *UPBJJs* had adequate facilities, even though their office buildings were rented.

As the number of students increased, *UPBJJs* add some more facilities to give better services to students. It happened at almost all *UPBJJs* but the development of *UPBBJ* was different from one another depending on the number of students and their unique local conditions. *UPBJJs* in Java and Sumatera have more students than *UPBBJs* in other regions. It is understandable as the two islands are more populous.

Attention from partner universities and local government also played an important role for *UPBJJs*. *UPBJJ* Bogor, for example, had never received assistance from partner universities, but the assistance came from West Java Education Office, which lent an office building at STM Negeri Bogor at Jalan Pemuda No. 50 (from 1984-1986). From 1986-1989, *UPBBJ* Bogor lent an office building at SMEA Negeri Bogor on Jalan Heulang. From 1989 to 1996, *UPBBJ* again occupied the old office building at STM Negeri Bogor. Starting from February 2005, *UPBJJ* Bogor built its own building at Jalan Julang No. 7, financed by UT Head Office, on a piece of land lent by Bogor local government.

From 1984 to 1986, *UPBJJ* Bandung occupied an office building at Gedung TKPJ IKIP Bandung. This building was formerly used by IKIP Bandung to implement a distance education program from 1982 to 1985. Because of inadequate location, from 1986 to 1990 IKIP Bandung permitted *UPBJJ* Bandung to renovate and use former SD Pembangunan IKIP Bandung. Based on a letter of decision from Directorate General of Higher Education, in 1991 *UPBJJ* Bandung was permitted to use part of buildings at former SPGN I Cibiru, at Jalan Raya Cibiru Km 15 Bandung. Like IKIP Bandung, UNPAD also paid attention to *UPBJJ* Bandung in areas of human resources and facilities. UNPAD let *UPBJJ* Bandung use one of the building at FMIPA UNPAD, located on Jalan Dago Bandung to implement Non-Educational Programs.

From 1984 to 2005 *UPBJJ* Yogyakarta was located at Universitas Gajah Mada (UGM) premises. At the beginning, *UPBBJ* Yogyakarta occupied a small building at UGM's workshop building. In 1985 *UPBJJ* Yogyakarta had to move to another place because Universitas Gajah Mada was to expand the workshop. *UPBBJ* Yogyakarta then occupied part of UGM's registration office, not far from the old office. At the end of 1987, *UPBJJ* Yogyakarta again had to move to another building because the office was to be renovated to expand UGM's publishing office. *UPBBJ* then occupied a building next to Pusat Penelitian

Perencanaan Pembangunan Nasional UGM (P4N-UGM). In 1990, UPBBJ Yogyakarta was given a new and more strategic building, that is, former campus of *Teknik Elektro* UGM. This was a two-story building, and UPBJJ was on the first floor. When UGM was transformed to State-Owned Legal Body (*Badan Usaha Milik Negara*), UGM had made optimal use of their resources, including the building occupied by UPBJJ Yogyakarta. In October 2000, UPBBJ Yogyakarta had to move to a new address: Jalan Asam Kranji SEKIP K7 Yogyakarta. Since its establishment in 1984, UPBJJ Yogyakarta had been exempted from paying all bills (water and electricity) and land taxes. But after it moved to Jalan Asam Kranji, UPBJJ Yogyakarta had to be more independent and paid its own rent, electricity and water bills, and other expenses. Since then, UPBJJ Yogyakarta had been trying to use the premises at SMA 11 Yogyakarta by approaching related institution, and it had not been successful. The effort to have its own office building continued. Universitas Negeri Yogyakarta (UNY) was approached in order for UPBJJ Yogyakarta to use the former SPG and SGO buildings. The effort was successful. On 16 February 2005, a memorandum of understanding between UNY Rector and UT rector was signed. On 15 September 2004, the development of UPBBJ Yogyakarta office building commenced and it was then officially open by Sri Paku Alam XII (on behalf of Sri Sultan Hamengkubuwono) on 4 June 2005. So, UPBJJ Yogyakarta's struggle to have its own building came to fruition after 20 years.

UPBJJ Surabaya has a different experience. At the beginning, UPBJJ had an office in a building lent by Dean of Economy Faculty of Universitas Airlangga (UNAIR) at campus B. From 1985-1988, UNAIR lent part of Pusat Ilmiah dan Pembangunan Regional's (PIPR) building to UPBJJ Surabaya. In 1989, UPBJJ Surabaya moved to Jalan Kapasari No. 3 Surabaya. This time UPBJJ Surabaya occupied a former Chinese school. UPBJJ Surabaya was there until early 2001. Before that, in 1997, UPBJJ Surabaya was offered a 2015 square meters land

next to Campus C UNAIR. The land was bought by UT, and was then exchanged with a land at Campus C UNAIR. In 2002, the development of *UPBJJ* Surabaya office building commenced. Since then, *UPBBJ* Surabaya had had its own building in a comfortable and strategic location.

UPBJJ Jakarta is one *UPBJJ* that has not had to move since its establishment in 1984. The preparation for UT's establishment was carried out in an office at Fakultas Pasca Sarjana IKIP Negeri Jakarta (now UNJ). IKIP Rector, Prof, Conny Semiawan then move the office to another building in that campus. The building used as the office for UT's preparation became the office of *UPBJJ* Jakarta, after Pondok Cabe campus was completed and the Preparation Team moved to Pondok Cabe. The building has undergone several renovations.

The building given by Directorate General of Higher Education to UT in 1991, which was used by IKIP Jakarta, was exchanged with the one used by *UPBJJ* Jakarta. It was specified in a Memorandum of Understanding. So, the land and building which had been used by *UPBJJ* Jakarta now belongs to *UPBJJ* Jakarta. In 2003, UT built a permanent office building on that 702 square meters land. At the beginning of its establishment, UT was financially assisted by FPS IKIP Jakarta. FPS IKIP Jakarta also provided UT with human resources and office equipment, such as tables, chair, cupboard, and computers.

UPBBJ Manado shares the same experience with *UPBJJ* Jakarta. The development of its office building is as follow: at the beginning, *UPBBJ* Manado used a building lent by IKIP Manado. When IKIP Manado moved to Tondano dan Tomohon, all facilities, land and buildings were handed over to Universitas Sam Ratulangi. During the time that it moved in 1995, the Rector of IKIP Manado, Prof M. Wullur, MS handed the building used by *UPBJJ* Manado to Universitas Sam Ratulangi. The rector of Universitas Sam Ratulangi then handed over the building to Head of *UPBJJ* Manado, which was formalized in a letter no.

355/PT.5.H.18/D/1995. The 800 square meters building was 24 years of age and was once renovated in 2005.

UPBBJ Ambon has a different story. In 1984, *UPBJJ* Ambon was located at Campus UNPATTI Poka. After the campus and *UPBJJ* Ambon office caught fire on June 2000, *UPBJJ* Ambon used two alternative offices: either at SD Negeri I Tanah Tinggi, with Christian staff, or one at PGSD UNPATTI, with Islamic staff. In March 2002 *UPBJJ* Ambon moved to a neutral area at Jalan Anthony Rhedok No. 17 Ambon, with both Christian and Islamic staff. Due to a conflict on 25 April 2004, *UPBJJ* Ambon moved again to Pulo Gangsa opposite Maluku District Police (Polda Maluku) until 5 January 2005. On 6 January 2005, *UPBJJ* Ambon moved again to Jalan Mutiara No. 40 Mardika Ambon. Before it moved to Jalan Mutiara, UT Head Office and UPBBJ Ambon renovated the building. *UPBJJ* Ambon now had a comfortable building for staff to provide services to the students.

In 1991/1992, buildings previously used by SPG and SGO throughout Indonesia were closed. As mentioned before that UT received transferred staff from SPGs and SGOs. In addition, UT also received buildings of former SPGs and SGOs, even though not all were handed over to UT. *UPBJJs* receiving buildings from SPGs and SGOs are *UPBJJ* Jakarta, Banda Aceh, Pekanbaru, Bengkulu, Medan, Bandung, Malang, Yogyakarta, Denpasar, Mataram, Palangkaraya, Samarinda, and Kendari. An example of smooth transfer was *UPBJJ* Pekanbaru. *UPBJJ* Pekanbaru previously located at UNRI Campus on Jalan Pattimura No. 9 Pekanbaru. Several years later, based on a Letter of Decision from the Director General of Higher Education No. 83/DIKTI/KEP/1990 on Universitas Riau's authorization of handing over SPGN/SGON facilities to *UPBJJ* Pekanbaru on 24 September 1990, gave instruction to UNRI Rector to hand over former SGON buildings to *UPBJJ* Pekanbaru. Based on that letter, UNRI Rector issued a Letter of Decision No. 3575/PT.22H/D/1992 on 13 August 1992.

In general, the transfer of land and buildings of former SPGs and SGOs from Dikti to other *UPBJJs* was smooth. The transfer of former buildings of SPGs and SGOs from Dikti to *UPBJJ* Makassar was in the form of exchange with Universitas Makassar for a 1690 square meters building. The facilities of *UPBJJs* vary. Not all experiences of *UPBJJs* in obtaining land and building included in this writing. Ownership status of land and buildings of *UPBJJs* can be found in Annex 7.

At the beginning most *UPBJJs* used typewriters; however in 1990s most *UPBJJs* had been equipped with computers. *UPBBJs* with big number of students like *UPBJJ* Surabaya, Bandung, and Padang (in 1990s belonged to Category A), in the late 1999 they have had LAN network. At that time, UT's Computer Center had implemented computerized data processing. UT had also equipped with computer program applications designed for specific purposes. Since 1984, information technology (IT) at UT continued to be perfected. For administrative purposes, e-administration has been used, and for learning purposes, e-learning has been used. However, due to some constraints, only few students' use computers, especially those living in remote areas, where they have difficulties to access computers.

UT welcomes the education network provided by Department of National Education and will join the network in 2007 to make students comfortable in accessing learning materials and other supports. UT is now connected to *Indonet*. Competence in IT for all *UPBJJ* staff is a must because it is related to quality of a distance higher education institution. Therefore, UT continuously implements trainings for *UPBJJ* staff. In addition, trainings in information technology are implemented for students, free of charge.

At the time this book is being written, all activities at *UPBJJ* have been done with computer, such as for input, keeping student data, registering learning

materials, student registration, and certificate. Annex 8 shows computers owned by each *UPBJJ*.

5) *UPBJJ*'s Budget

Like any other unit at UT Head Office, the budget for *UPBJJs* is from the allocation decided by Rector. Budget allocation for *UPBJJs* is counted based on the number of students, geographical location, examination fee, operational costs and amount of salary for civil servants, and other policies made by Rector.

In general, around 45% of students' fees are returned to *UPBJJs*. *UPBJJs* are authorized to manage the budget by referring to general guidelines set by UT Head Office. Budget allocation for *UPBJJs* consists of salary, operational cost, tutorials, cost of learning activities, and examination.

Salary is decided each year according to the number of *UPBJJs*' staff. To pay their salary, UT issue Letter of Authorization (*Surat Kuasa Otoritas – SKO*) of Staff Salary for *UPBJJs*. Based on SKO, Heads of *UPBJJs* send *Surat Permintaan Pembayaran untuk Gaji Pegawai* to local KPN each month. The salary can be paid after *UPBJJs* have received *Surat Perintah Membayar (SPM) Gaji*. A copy of this SPM Gaji should be sent to *Subbag Anggaran Rutin dan Pembangunan BAUK-UT*. The account of UT Head Office is calculated based on *Pagu Anggaran Rutin UT* minus salary of all *UPBJJs*' staff and salary of Head Office's staff, and staff's overtime.

Actually, *UPBJJs* are asked to formulate budget plan each year. However, only few *UPBJJs* send their budget plan because the lack supporting data they need. Therefore, starting in 2006, the Planning unit sends prediction of income to all *UPBJJs* for them to formulate their budget plan.

Up to 2005, the operational cost for *UPBJJs* had been based on the number of students. When a *UPBJJ* had a few students, it received at least Rp. 3.500.000. Since 2006, the operational cost has been based on number of

student and has been changed into management cost. This operational cost is used to pay officials' incentive (Head, Coordinator, Head of Sub-Unit, and Treasurer), bills, incentive for staff, office equipment, furniture, local transport fee, facility maintenance, final examination, PKM.PKP, tutorials, building rehabilitations, etc.

Activities – whose budget has not been decided – have their own regulation. The use of operational budget should be reported to UT Head Office. If *Uang Muka Kegiatan* (down payment, or *UMK* for short) received from UT Head Office has not been reported, the *UPBJJ* will not receive new *UMK*. Other fund, especially for learning activities, tutorial, and examination at *UPBJJs* is based on number of students, multiplied by unit cost per student.

Beside salary and operational budget, *UPBJJs* also received direct fund. It may be fee for implementation of inauguration, certificates issuance, face-to-face tutorials, students' activities, financial assistance from local government, etc. All income and its use should be reported to Vice Rector II, at the latest one month after it has been received. Starting 2006, the fund should be sent to UT's bank account before it is used.

Since 2006, *UPBJJs* have had to make a *Daftar Nominatif Penggunaan Dana* each month for the purpose of withdrawing money to pay salaries and operational budget. The list should be approved by Head of Financial Bureau of Department of National Education, before it is forwarded to KPKN. According to the new State Financial Law, *UPBJJs* are no longer allowed to directly receive fund from the public. Every earning should be sent to UT's bank account at BRI. The Bank then sends it to Kas Negara. UT can only use fund received after the *Daftar Nominatif Penggunaan Dana* has been approved by Financial Bureau of Department of National Education and KPKN.

Conclusion

UT has been making many efforts to improve the performance of *UPBJJs* in order to realize its 2010 and 2020 vision and mission. Improvements of quality of services through restructuring and revitalization of *UPBJJs* have been done for a long time and have been disseminated at Rakornas 2005. The purpose of revitalization is to enable *UPBJJs* to have the same quality of services related to registration, examination, distribution of learning materials, academic and administrative supports for students, and implementation of cooperation with other institutions to increase student participation. Therefore, *UPBJJs* should always implement their programs based on the vision and mission of UT. UT's vision and mission are directed to three main focuses: Improvement of Academic Quality, Improvement of Student Participation, and Improvement of Internal Management. The position of *UPBJJs* as the front-line service providers in the regions has caused them to develop. *UPBJJs* are centers of integrated and effective services that can reach all UT's students. In addition, UT is now preparing for ISO Certificate 9001-2000 for management development at 11 *UPBJJs* (Jakarta, Bogor, Bandung, Semarang, Purwokerto, Yokyakarta, Surabaya, Malang, Palembang, Padang and Pontianak) in order to assure the quality of its program implementation.

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Future Challenges Universitas Terbuka to be a Center of Excellence of Distance Higher Education Institution in 2020

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Introduction

This paper is to discuss the efforts to realize the vision of Universitas Terbuka (UT) of becoming a center of excellence in distance higher education in the world in 2020. It begins with the explanation of the significance of becoming a world's leading distance higher education institution (PTJJ), as well as reasons and ways to become one. It will then go on to discuss the existing external conditions, both globally and nationally, that should be prepared to pave the way for a world-class PTJJ. Current and future trends of distance higher education will be explored in order to provide the context, scope, rational considerations for the efforts to realize UT's vision of becoming one of the world's leading distance

higher institutions. Further discussion will focus on the prospects of global role of distance higher education institutions as well as challenges faced and actions to be taken to realize UT as a leading institution. With regard to plans and actions to be taken by UT, its human resources play an important role in realizing UT's vision of becoming one of the world's leading distance higher education institutions.

Significance, Reasons, and Ways to make UT a World's Leading Distance Higher Education Institution

UT's 2005-2010 Strategic Plan (Renstra) stipulates that "UT is determined to be one of leading distance higher education institutions in Asia in 2010 and in the world in 2020". In detail, the vision is specified that UT is determined to be one of the best institutions in the area of management, research, development, and information about distance education in Asia in 2010 and in the world in 2020. The formulation of such specific, measurable, and time-planned vision is very important. A clearly formulated vision should be able to inspire and motivate all UT's staff, from the highest hierarchy in the organization to the lowest, to work together and make every effort to realize the vision. Therefore, all UT's staff should be responsible and actively participate to realize the vision.

The reason why UT should become a center of excellence is clear. The function, mission and purpose of the university require it to continue to exist, as it is the place where people can explore, learn, preserve and find new knowledge, and then disseminate it to others in a responsible manner. Learning from the experience of various organizations in the fields of business, service, and other industries, some best practices should be taken into account and applied in realizing UT's vision to be a leading institution, to develop its

competitive capacity and the capacity to continue to exist as a leading distance higher education institution. Learning from the experience of a number of organizations, as critically discussed in Thomas J. Peter and Robert H. Waterman's *In Search of Excellence*, there are eight characteristics of organization that can contribute to an institution's survival in competition. The eight characteristics will be discussed in detail as one of sets of references in UT's future improvement and development in accordance with the vision and mission to be realized.

The *first* characteristic is strong motivation to act and to move forward. An institution with this sort of motivation will always think critically to improve itself, and will never be trapped in the current condition. The motivation to change and to improve should continuously grow, and be enhanced and become the vision and life-style of each individual staff. The adopted value should be "Keep on doing, keep on improving, and keep on trying" until it starts to bear fruit. Solution to any problem faced by the institution should be found, and continuous improvement should be consistently carried out. Institutions with this kind of attitude will never stop innovating.

The *second* characteristic is approach to clients. Most organizations learn from their clients. Clients give valuable inputs about quality, service, and reliability, so that the organizations can meet their clients' needs and expectation and survive in tight competition. Good organizations listen attentively to their clients and appropriately follow up the inputs. Most product innovation and improved services stem from clients' inputs.

The *third* characteristic is the spirit of autonomy and entrepreneurship. An innovative organization gives chance to innovators, who can produce new things needed by the clients and necessary for the survival of the organization. Creativity is highly appreciated. Each individual learn to take risks and to try out

their innovation and creativity. They learn from each other and learn from their mistakes, and try their best to improve in order to avoid making the same mistake.

The fourth characteristic is productivity through human resources. A successful organization sees human resources as a source to acquire quality and productivity, not as objects for efficiency efforts. Human resources are the institution's main assets which can move, direct, and realize the vision, mission, and purpose of the institution.

The fifth characteristic is organization's direct internally-driven values. The philosophy of a leading organization is concerned more with its achievement rather than its technology and economic resources, structure of organization, and innovation that has been done. The values of organization should be enhanced with sense of belonging, spirit of unity and willingness to contribute to organization's future progress.



Human Resource Training Development, UT Jakarta

The *sixth* characteristic relies on organization's ability to, as Peters & Waterman call, "fit to the net." A successful organization does business in the area of its true expertise, and avoids doing business the area beyond its true expertise. Experience has shown that an organization focusing on specific expertise and hard to beat by its competitors has an unbeatable competitive edge. Organization's core of competence should be developed, maintained, and refined seriously and continuously in order to ensure its survival.

The *seventh* characteristic is organization's simple form and its streamlined staffing. Most successful organizations run not with big structure of organization, but with a simple one and streamlined staffing. A leading organization works efficiently. Simple structure of organization and streamlined staffing will enable an organization to be flexible to act effectively in fulfilling the needs of its clients.

The *eighth* characteristic is simultaneously loose-tight ownership. A leading organization is simultaneously centralized and decentralized. On one hand, an organization is fostering autonomy down to the lowest level of hierarchy, to the front line of service provision, or to product development team which directly produce the products to be presented to the clients. However, an organization should also maintain the central characteristic of its basic values. Both decentralization and centralization needs should be equally managed so that they can be mutually supportive and in synergy with organization's strong desire to keep moving, be successful and sustainable.

Characteristics of a leading organization as mentioned above are common and not really surprising. Apart from them, human resources play an important role in mobilizing thoughts, initiatives, plans and actions to improve the organization's performance so that it can develop, be highly competitive, achieve

the expected level of excellence, and be able to survive in the increasingly tight global competition.

The eight attributes are simplification of a complex process for an institution or organization to achieve the level of unbeatable excellence. A successful organization has characteristics which are in line with those attributes. In social sciences, any social change or changes in social systems, there is no single recipe that can be universally used by any institution or organization to achieve its mutually agreed objectives. However, the attributes can be used as general references by an institution to achieve higher position with true and unbeatable excellence. Human resources are the key factor that can realize an institution's high reputation.

The challenge faced by a leader of an institution is to foster the spirit of unity, quality-oriented way of thinking and performance, both individually and institutionally. The mentality of the institution's members should be developed in such a way that it enables them to appreciate innovation, creativity, quality, as well as value and spirit to realize the vision, mission and objectives of institution.

Global and National External Conditions

External environment, nationally and globally, has significant influence on the life and survival of an institution. In the global context, the role of distance higher education institutions to improve equity of access to higher education and to create a knowledge-based society is increasing. The move to a knowledge-based society is driven by information, communication and technology (ICT).

As a good instrument, ICT allows free access to knowledge, information, data and best practices in many fields and life sectors (UNESCO, 2002). Realizing a knowledge-based society requires fundamental changes in teaching

and learning culture, organization of learning materials, structure of learning, and appreciation to students' intellectual, emotional and social needs. Levels of skills are needed to make diverse life with higher competence so that the society is challenged to continuously improve the performance of education

In line with the idea put forward by UNESCO, lifelong education is the main priority in any country or society in the world. UNESCO has four basic principles in realizing a knowledge-based society: learning to know, learning to do, learning to exist, and learning to live together. This is the realization of concept of lifelong education and bears consequences on the application of the concept on education for all, including higher education for all. Each member of society has equal rights get education up to the highest level.

At the national level, UT refers to the main policy stipulated by the Directorate General of Higher Education, Department of National Education in *Higher Education Long-Term Strategy (HELTS) 2003-2010*, which include three things: nation's competitiveness, autonomy and health of organization. This national policy gives direction about the vision, mission, and objectives of national higher education in preparing national human resources to have high and relevant competence needed by the community and development in order to boost nation's competitiveness in global competition.

UT's Internal Conditions to be prepared

Institutionally, UT has Strategic Plan 2005-2020, which then goes into details in the Operational Plan 2005-2010, focusing on implementation of three areas, namely (1) improvement of quality and academic relevance, (2) improvement of educational services, (3) and improvement of internal management.

UT also has a sound management system through implementation of quality assurance system as an internal mechanism for assuring internal quality which periodically requires external quality assessment. Achievement and performance of this management system and quality assurance have gain external recognition through certificate of quality and international accreditation given by International Council for Open and Distance Education (ICDE) Standards Agency (ISA), International Organization for Standardization (ISO), and national accreditation by the National Accreditation Board for Higher Education (BAN-PT).



Accreditation by ICDE (International Council for Open and Distance Education), June 2005

In partnership efforts and development of global network, UT has a strong capacity even though it still needs to be enhanced, maintained and further expanded. UT is an institution which is actively engaged in some initiatives and real actions in improving the quality of distance high education institutions. For example, UT is one of founding members of Asian Association of Open Universities (AAOU) in 1986 and Global Mega-Universities Network (GMUNET) in

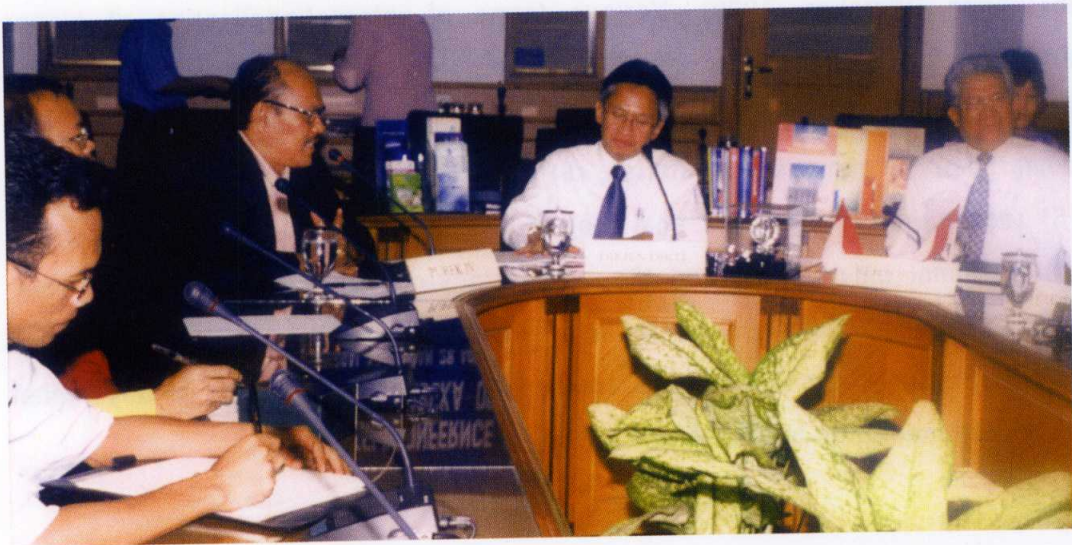
2003, and one of active members of International Council for Open and Distance Education (ICDE). UT's membership in this international context is a form of UT's participation in some best practices in the implementation of distance higher education institutions.

UT's Strategic Plan 2005-2020 was formulated through a critical analysis by taking into account the following aspects: (1) globalization and world's economic changes, (2) continuous improvement of quality, (3) information and communication technology (ICT), (4) changes in social and political conditions, and (5) equality of access to education. These are the most important considerations in formulating UT's Operational Plans, which are realistic, concrete, measurable, and specific, which make it easy to be interpreted in real actions annually, and is influential and beneficial for systematic, comprehensive and continuous development of UT in the future.

However, until recently UT is still facing some challenges regarding the perception of society and public image about distance education and UT's system as well as UT as a distance higher education institution. The perception and image should be continuously improved until the society truly convinced that distance higher education institution is a realistic choice which can fulfill the needs of the society to continue education at the university level. The program of distance higher education institution should be in line with the progress required by professional competence and cater for the need of lifelong education, with the fee within the reach of the clients. At the same time, the culture of learning should be fostered, so that the system of distance higher education can be accepted as an effective mode for the government to improve the quality of human resources and for the community to create, preserve and disseminate new knowledge.

Current and Future Trends in Distance Higher Education

The current context and future trends in higher education provide chances and challenges and at the same time require any distance higher education institution to act by considering a number of aspects and context in national and global sphere. Internationalization and globalization become important natural phenomena in higher education sector as a result of the increasing convergence and economic and life inter-dependence in global context ((van Fught, van der Wende & Westerheijden, 2002). Actually, these have been long-time trends in higher education, as old as the existence of higher education system itself. In its historical development, students, lecturers and researchers from one institution have visited and stayed for a certain period of time in other institutions to learn, share ideas, and find new knowledge.



Nowadays and in the future, internalization of higher education is increasing due to easy access to other countries and continents, and expansion of information and communication technology, and also because of the knowledge itself, which requires scientists and researchers to work together and share knowledge in various activities and forums. There is no single system of higher education in the world which is sterile so that it can be indifferent to external influence. A higher education institution, by any means, can be always be intervened and get international influence, such as through academic staff who study in other countries or becoming a lecture or visiting researcher in other countries, and because of the relationship and partnership with other institutions or other international agencies.

The intensity level of internationalization of higher education vary, from the modest one to a multifaceted process, integrating international dimensions in learning, research, and public services into the main function of higher education institution (Watcher, 1999). Various forms of internationalization of higher education include the following: students' mobility, (2) mobility of academic staff, (3) curriculum internationalization, (4) development of complete and comprehensive campus subsidiaries, (5) institutional cooperation and networking, (6) recognition of programs and subjects by other institutions, (7) network of transnational universities, and (8) virtual trans-national learning (van Damme, 2001). This phenomenon is in line with the growth of information and communication technology which augments international culture of any higher education institution in the world.



Globalization in higher education occurs due to a number of interrelated economic, socio-political, and technological factors (Mason, 1998). Economically, higher education institutions are encouraged to accommodate international students who pay full fees without subsidy. From the student's point of view, they want to have international experience, which is expected to add additional values and have positive impact socially, culturally, and professionally on global job competition. Access to global higher education is made possible by availability of information and communication technology for anybody with an access to this facility.

By using the right technology, distance higher education institutions have the potentials and chances to provide services to clients in global context, which parts of the planet they live in. This is in line with egalitarian philosophy and principles of distance higher education institution with flexibility, openness, and accessibility for users regardless of their geographical locations, geopolitical, social and economic conditions. However, there are some problems to be solved in a distance higher education institution before it becomes a prominent service

provider at the global level. Internally, a distance higher education institution should be able reorganize itself in order to have a new role effectively at the global level. A distance higher education institution should prepare and equip itself with a new technological strategy and build new competence for all personnel to serve the clients at the global level with cross-cultural differences. Externally, a distance higher education institution should be able to cope with differences in socio-cultural background, economic, and technology, and the impact on international students.

Prospect of Global Role of Distance Higher Education Institution

The latest development in public service sector, especially in education, shows close relationship between higher education and market demands. The pressure for expansion and shift of perception about higher education as personal need bear consequences not only on mechanism of public funding but also on structural change of higher education system. Control of the government as funding agency in the implementation of higher education has shifted to market force which requires higher education service. This trend also applies to any distance higher education institution worldwide.

In the national context, since its establishment, UT has relied on public funding for its program implementation, which is received from students' fee, not from government public funding. For distance higher education institution, the proportion of funding from the client is increasing. The new paradigm, laws and regulations from the government which require higher education institutions to change their status to Legal Body University (BHP) with wide autonomy in their management also require UT to adopt immediately. The change of status is more than a technical change on paper, but changes in paradigm of thought, frame of

reasoning, style of work, work ethics of all UT's personnel to be more professional and autonomous in the implementation and management of distance higher education institution.

The government and society worldwide are challenged to improve access to and participation in higher education. The need to realize higher education for all and globalization of higher education has attracted many higher education institutions to apply the system of distance education. During the last quarter of the last century, the system of open university has been developed by many countries in the world in order to accommodate the increasing demands and needs to higher education in many countries, from the highly populated countries like China, India, Pakistan, and Indonesia, to the less populated countries like The Netherlands, Sri Lanka, and Malaysia. The system of distance education is steadily increasing, with more institutions operating with double system, providing flexibility to students to study in distance mode or face-to-face, in campus or at home and workplace, or combination of face-to-face and at a distance, or full-time and part time.

Internationalization of higher education has encouraged the provision of distance education services in global scale, because the system of distance education is within the reach of the community and can be effectively applied to provide cross-country and transnational distance education services. Advanced information technology and communication is now pushing distance education institutions to extensively offer cross-country non-traditional programs, and provide services to clients living in any part of the planet. The needs for universal access and education for all pose a challenge and opportunity to higher education institutions of any form to change and adapt. Changes in higher education paradigm, societal needs and new technology have made indistinct line between systems of traditional face-to-face education, non-traditional and

distance education. Clients are now more fortunate to have freedom to choose any mode of learning they want.



However, there are some things that should be noticed in the practice of internationalization of distance education institutions. The main constraint is concerned with the language of instruction, varying economic capacity of international community, availability and accessibility of information and communication technology facilities. Implementing internationalization of education is relatively easy in countries with advanced economy and information and communication technology facilities. People in developing countries are less fortunate due limited resources. International cooperation to help each other should be made in order to disseminate knowledge through distance education system. Therefore, the gap between various knowledge-based community groups can be bridged.

Distance education higher institutions (PTJJ) have potentials to dissemination and share knowledge, because any higher education institution can be a "natural house" for the process of creation, preservation, dissemination and sharing of knowledge (Sallis & Jones, 2002). Higher education for all to

improve competence and competitiveness is now a major theme and one of important objectives to be achieved by any government or society in the world. Program of distance education makes it possible for people to keep learning and developing new knowledge.

Even though developed countries have had universal access and education for all, with more than half of school-aged population actively participate in higher education, this kind of condition poses a great challenge for developing countries. Developing countries faced many obstacles due to limited resources and government's reduced funding for higher education. This problem may get worse in the future because higher education sector should share public funding with education sector, and other development sectors which also need public funding. Each developing country has its own public policies and development priorities, and education sector, especially higher education, does not always get serious attention or be in high priority in the government's list of priority.

The pressure to realize higher education for all does not necessarily mean that the system of higher education and number of higher education institutions can be developed without limit. It cannot be done because the level of government's public funding tends to decrease, and higher education institutions become more dependent on clients' contribution. Distance higher education institutions become a rational choice which is naturally integrated in the mainstream of higher education system as an answer to the challenge to realize higher education for all.

The system of open university, in which some universities have developed into mega universities with the capacity to accommodate hundreds of thousand and even millions of students, is an appropriate system to realize universal access to higher education. The system of distance education makes it possible to improve quality which is in reverse proportion to cost. In the face-to-face

system of education, quality improvement is correlated with cost. There is a natural paradox in distance education system that a distance education institution can a large number of student and that quality of implementation can be enhanced even though the number of students is increasing, and the cost can be reduced in order to provide services to a large number of students, nationally and even globally. The latest development in information and communication technology has encouraged some modes of ITC-based learning to be applied in high education institutions.

Distance higher education institutions world-wide are challenged to respond to a new paradigm which goes to a new direction and fulfill the latest needs with regard to globalization, internationalization, education for all, partnership and cooperation, and competition in providing services for higher education. Partnership and cooperation are natural responses for competition. A leading distance higher education institution is encouraged to develop a network of cooperation with other institutions, such as development of joint programs and subjects, recognition of programs and subjects from other institutions, credit transfer, research and development.

In order to be competitive and excellent, a distance higher education institution should develop partnership with other institution so that performance and services to clients can be improved. Distance education higher educations all over the world also have some opportunities to explore possible cooperation which is beneficial to the institutions and students. The clients now have freedom and flexibility to choose the subjects they want to study, how and when to study them, and which institution they think providing the best service they can afford. This is the main challenge for a distance education institution to survive and to be excellent.

Challenges and Actions to Realize a Leading Distance Higher Education Institution

Competition between distance higher education institutions is getting tight, even at the same time it offers some opportunities for mutually beneficial cooperation to improve performance. This condition should naturally encourage distance education institutions, including UT, to work more seriously, perform better, try to improve quality so that the vision, mission and objective can be achieved. Distance education institutions are encouraged to take concrete actions, work in partnership with other institutions in various areas that can help improve the quality and performance of staff and institution. The areas include (1) research and development, (2) quality assurance, (3) dissemination of information and innovation, (4) publication of journal and research results, (5) information and communication technology, (6) active participation in existing professional organizations, (7) recognition of program, subject and credit transfer between PTJJ, (8) program development and joint subjects, (9) staff exchange, and (10) anticipation of possible problems in cooperation and partnership.

Some of the above ideas have been implemented effectively by UT, and others still need to be enhanced, and the format should be improved to make it more effective and mutually beneficial. In order to realize the vision of becoming a mega university with high competitive edge and reference for best practices in PTJJ, UT needs to carefully follow up and face the challenge. Therefore, quality improvement and equality with other leading distance education institutions should be constantly carried out as a means of self-evaluation and self-improvement, and to ensure UT's position as an excellent and competitive distance higher education institution. Self-evaluation which is followed up by continuous self-improvement should be implemented earnestly. The quality and competence of UT's human resources should be improved so as to make UT a

university with excellent characteristics. Some important actions that should be done in order to make UT an excellent university are as follow.

1. *Research and development.* Research and development is an area which is less attractive to distance higher education institutions, although this condition is getting better from time to time. This is due to the fact that the focus of most distance education institutions in the world is on expansion and spreading out their services and scope of learning so that the institutions can accommodate a huge number of students, as part of national strategy to increase participation in higher education which is in line with the idea of higher education for all. Development of distance higher education institutions should be continually enhanced and every effort should be made to avoid actions based on intuitions and unnecessary trial and error actions. Cooperation in research and development can be done in various areas, such as improvement of institution's performance, improvement of implementation methods of PTJJ, and basic research in various fields of study, as well as other areas of priority of the institutions concerned.
2. *Quality Assurance.* Distance higher education institutions all over the world have the same interests to continually assure and improve quality and make every effort to satisfy the needs and expectation of concerned parties for accountability, reliability and transparency. Quality assurance always involves self-evaluation and quality assessment, internally and externally. Cooperation between distance higher education institutions in this area is expected to facilitate the process of quality improvement through external comparison of performance and quality. By so doing, UT can assess itself and tries to put itself in the front line to keep abreast with the progress made by other similar institutions. If UT has high quality standard or at least is equal to other leading institutions, various forms of cooperation in numerous areas can be easily developed and effectively implemented.

3. *Dissemination of information and innovation.* Distance education institutions should innovate in order to improve performance, quality of service, and methods of learning at a distance. Dissemination of information and innovation should be done so as to make the clients and the general public know about the development of distance education institutions, both conceptually and operationally. As such, the public image of PTJJ in general and UT in particular can be built up, and the society can be no longer doubtful about the achievement and reputation of PTJJ as an effective method of learning which can contribute to development of national human resources. Therefore, PTJJ institutions need channels of information dissemination and innovation so that creation, dissemination, sharing of best practices experience and both adoption and adaptation of new knowledge can be done properly. Network and partnership between various institutions should be developed so that exchange of information and innovation can be done more intensively.
4. *Publication of journals and research results.* Many academic staff of distance education institutions carry out theoretical and practical researches. Publication of journals and research results can boost exchange of ideas and provide comparative academic quality among the institutions. It can enhance the profile and academic image of both staff and institutions. It will also give constructive impact on the staff and institutions to carry out joint researches in numerous fields related to priority and interest of each institution. In publishing journals and research findings, editors should represent institutions with different characteristics, work ethics and social conditions. Therefore, a distance education institution can compare quality and achievement with others and learn from each other about best practices in order to improve academic quality in areas research, dissemination of research findings and development.



5. *Utility of information and communication technology.* Advanced information and communication technology provide opportunities for lifelong education. Lifelong education has become compulsory for each member of society, due to fundamental shift from era of industrial society to era of knowledge-based society, which requires to learn for a lifetime. This dynamic change also requires changes in types and characteristics of jobs, and the need to renew competence and professional capacity continuously. Distance education institutions should take initiatives to adapt and adopt technological development and satisfy the needs of society to renew knowledge through utility of available technology. The development of new technology requires distance education institutions to apply new strategies in accordance with the needs of students, and provide opportunities to cooperation with other

distance education institutions in the process of distance learning. However, application of information and communication technology for distance education institutions in developing countries remains a problem, due to limited facilities, cost, access and social culture. Distance education institutions should work harder to overcome this problem through dissemination of information, internalization, and trainings for clients.



Rektor UT as a key-note speaker at the 22nd World Conference on Distance Education, conducted by ICDE in Rio de Janeiro, Brazil, 3-6 September 2006

6. *Active participation in existing professional associations and organizations.*
Joint activities among distance education institutions should be able to enhance the role of existing professional associations and organizations to work together to realize mutual objective to improve access, provide equal

opportunities for the society to participate in higher education in accordance with the idea of higher education for all. UT should play more active and constructive role in mobilizing activities of existing non-profit, non-government, multilateral, international, regional and national organizations in distance education, such as International Council for Open and Distance Education (ICDE), Global Mega-University Network (GMUNET), Asian Association of Open Universities (AAOU), Southeast Asian Ministers of Education Organization Open Learning Centre (SEAMEO SEAMOLEC), United Nations Education, Scientific and Cultural Organization (UNESCO), *Asosiasi Profesi Pendidik-an Jarak Jauh Indonesia (APPJI)*, and other relevant organizations. Professional organization is an effective forum to compare quality and share experience of best practices. Leadership and excellence of a distance education institution will be put to the test through its active participation in mobilizing the organization. UT has gained its strong foundation because it has taken initiatives and real actions, such as being the mastermind and founder of some of the organizations. Through those organizations, image development and public communication will be more effective to increase knowledge and awareness of the society about roles and contributions of distance education institutions in social and economic development and quality human resource development through participation in distance higher education institutions.

7. *Recognition of programs, subjects, and credit transfer among distance education institutions.* Distance education institutions are challenged to work together in order to ease the process of credit transfer, recognition of title, program, and subject so that it can provide better flexibility for students to join programs at different institutions. It requires serious effort from distance education institutions continually improve their quality so that equality with other similar institution can be achieved. Recognition of programs or subjects

can be easily achieved if the institutions use the same language of instruction. However, distance education institutions in general operate as national institutions and each uses national language as language of instruction.

The current trend shows that more distance education institutions use an international language of instruction, namely English, and act as service providers of global distance education, reaching students living in any part of the world. Until recently, English has been the dominant international language, used for formal international communication in government, business, computer, academic communication and language of instruction in world-class higher education institutions. World-class universities, whether they employ face-to-face or distance learning mode, use English as a language of instruction in order to meet the needs of their international students. International higher education institutions which can reach international clients cannot avoid using English as a language of instruction. English competence of UT's human resources should be continually improved if it really wants to realize its mission of becoming one of world-class centre of excellence.

The possibility of recognition of programs and subject is bigger for post-graduate level than graduate level. Someone holding a first degree from a particular university can continue to post-graduate program in a university in another country even though the language of instruction is different, as long as he meets the selection criteria set by the university. Credit transfer and recognition of programs and subjects should be easy as long as they meet minimal selection criteria. The challenge for distance education institutions is to work together to facilitate the process of credit transfer and recognition of title, programs and subjects. Language of instruction is one of the main

constraints to grab that opportunity. Some efforts have been made by UT through quality comparison, learning from best practices among distance education institutions, and carrying out necessary improvement.

8. *Development of joint programs and subjects.* Distance education institutions should explore the possibility of developing joint programs and subjects. This opportunity is more pragmatic to be done at post-graduate level. This kind of cooperation is more flexible in making use the joint subjects. For example, subject can be developed together, and related institutions can use them or modify them according to the needs of students, or translate them in the language of instruction used in the country. Partner institutions can also be flexible in developing study guides, or set system of assessment for the subject. But still, language of instruction and academic and administrative communication remain the main constraint in this effort.

9. *Staff exchange.* Staff exchange is an important and constructive step for distance education institutions to cooperate and share experience and best practices. Staff exchange can be done bilaterally between institutions and multilaterally between similar institutions with various institutions, agencies, organizations or multilateral associations having the same interests in distance higher education. Staff exchange can be followed up by a number of forms, such as research cooperation, development of joint distance education methods, cooperation in public services, development of programs and subjects, joint innovation, joint utility of resources, and other forms which are constructive to the institutions concerned. UT needs to more active in sending and receiving staff exchange with similar institutions, which will be constructive to future development of the institution and professional competence of the staff concerned. Informal network between staff of institutions should be necessarily developed, because many things can be

initiated when the staff know each other and involved in joint research projects or professional development.

10. *Anticipation of possible problems in cooperation and partnership.* Cooperation and partnership between distance education institutions have potential problems that should be anticipated. There should be problems to be anticipated related to the language of instruction used, social and cultural differences, and level of sophistication of technology in the each institution. Most distance higher education institutions use the national language as the language of instruction. It means that the printed materials and media use as well support service are provided in national language.

International and inter-institutional cooperation between distance education institutions is often time obstructed due to limited fund and budget. However, as the prospect is mutually beneficial and constructive in the long term, distance education institutions should consider developing a framework of partnership. This kind of effort can be facilitated by international, regional or multilateral organizations, such ICDE, UNESCO, SEAMOLEC, AAOU, as well as other partners and institutions with the same interests and purposes, and even national institutions.

Conclusion

Excellent and competitive distance higher education institutions should always be encouraged to critically evaluate themselves and make continuous improvement. Distance education institutions are expected to promptly, properly and accurately response to the needs of their clients and continually improve the service in order to make the clients really feel that they get the service they want. As a distance higher education institution, UT should determine, manage, adapt, equip itself with human resources facilities, system and procedure, adapt to the needs and values of the society, clients and other interested parties.

Human resources play an important role in the effort. The effort to improve human resources can be done partially or as the situation requires. UT needs comprehensive efforts to improve quality, competence, formal qualification of human resources in various fields that can support the implementation of a mega university with the capacity to reach both national and international students. Steadily and systematically, UT should continue to make an effort and direct itself to be excellent and make real contribution and be competitive with other similar institutions in certain areas which are relevant the needs of the society. Some core areas of competence and expertise should be developed and enhanced so as to make UT one of global distance education providers in some specific fields of study.

The challenge to be an excellent distance higher education institution is an immediate need to be fulfilled and should be realized together. Therefore, management and staff should share the same perception, knowledge and awareness of the problems, scenario of solution, and actions. Developing a world-class institution cannot be done individually or by a small group of people in an institution as big as UT. All UT's staff should have high commitment, spirit of unity, sense of belonging, and responsibility to realize the vision, mission and purpose of the institution. UT is a national asset with a key role to implement

higher education for all, develop national resources with global competence, and realize knowledge-based modern Indonesian society that is prosperous, strong and long-lasting.

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Attachment

Table 1. Development of the Faculty of Economic and Development Studies

Courses	1991	1993	1995	1997	1999	2001	2003	2005	2006
Economic and Development Study (S1)	√	√	√	√	√	√	√	√	√
Management (S1)	√	√	√	√	√	√	√	√	√
Industrial and Service Supervisor (D-II)	-	√	√	√	√	√	√	-	-
Applied Computer and Accounting (D-II)	-	√	-	-	-	-	-	-	-
Graduate Program of Management (S2)	-	-	-	-	-	-	√	√	√

Table 2. Development of the Faculty of Mathematics and Natural Science Studies

Courses	1991	1993	1995	1997	1999	2001	2003	2005	2006
Mathematics (S1)	√	√	√	√	√	√	√	√	√
Applied Statistic (S1)	√	√	√	√	-	-	-	-	-
Statistic (S1)	-	-	-	-	√	√	√	√	√
a) Biology (S1)	-	-	-	-	-	-	√	√	√
b) Agricultural Extension and Communication (DIII), with specialization in:									
a. Agricultural		√	√	√	√	√	√	√	√
b. Husbandry		√	√	√	√	√	√	√	√
c. Fishery		√	√	√	√	√	√	√	√
c) Agricultural Extension and Communication (S1), with specialization in:									
a. Agricultural								√	√
b. Husbandry								√	√
c. Fishery								√	√
d) Food Technology (S1)								√	√
Environmental Management (D1)	-	-	√	√	√	√	√	√	√
Post-Harvest Food Management (Certificate)	-	-	-	-	-	-	√	√	√
a) Post Harvest Management of Husbandry Food (Certificate)	-	-	-	-	-	-	-	√	√
b) Post Harvest Management of Agricultural Food (Certificate)	-	-	-	-	-	-	-	√	√
Graduate Program in Fishery Management	-	-	-	-	-	-	-		

Table 3. Development of the Faculty of Education and Teacher Training

Courses	1991	1993	1995	1997	1999	2001	2003	2005	2006
Teaching Certificate	-	-	-	-	-				
Teaching Certificate IV							-	-	-
DII Kindergarten Teacher Education	-	-	-	-	-	-	-		
DII Primary School Teacher									

Courses	1991	1993	1995	1997	1999	2001	2003	2005	2006
Education									
S1 Primary School Teacher Education	-	-	-	-	-	-			
DII Sports Education									
Primary School Physical and Health Education (DII)									
Indonesian Language Education (S1)									
Indonesian Language Education (DIII)	-	-	-	-	-			-	-
Indonesian Language Education (DII)						-	-	-	-
English Language Education and Indonesian Language Education for Open Junior High School Teacher (Accredited Certificate)	-	-			-	-	-	-	-
English Language Education (S1)									
English Language Education (DIII)	-	-	-		-				
English Language Education (DII)						-	-		-
English Language Education and Indonesian Language Education for Open Junior High School Teacher (Accredited Certificate)	-	-			-	-	-	-	-
Mathematic Education (S1)									
Mathematic Education (DIII)	-	-		-	-				
Mathematic Education (DII)									
Mathematic and Physic Education for Open Junior High School Teacher (Accredited Certificate)	-	-			-	-	-	-	
Physic Education (S1)									
Mathematics and Physics Education for Open Junior High School Teacher (Accredited Certificate)	-	-			-	-	-	-	-
Biology Education (S1)									
Biology and Physic Education for Open Junior High School Teacher (Accredited Certificate)	-	-			-	-	-	-	-
Natural Science Study Education (DIII)	-	-	√	√	-	√	√	-	-
Natural Science Study Education (DII)	√	√	√	√	√	-	-	-	-
Chemistry Education (S1)	√	√	√	√	√	√	√	√	√
Social Science Education (S1)	√	√	√	√	√	-	-	-	-
Economics and Geography Education for Open Junior High School (Accredited Certificate)			√	√	-	-	-	-	-
Pancasila and Civic Education (DII)	√	√	√	√	√	-	-	-	-
Civic Education (S1)	-	-	-	-	-	-	√	√	√
PPKN and Economics Education for Open Junior High Teacher (Accredited Certificate)			√	√					

Courses	1991	1993	1995	1997	1999	2001	2003	2005	2006
Economics and Cooperation Education	-	-	-	-	-		√	√	√

Table 4. Development of Faculty of Social and Political Science

Courses	1991	1993	1995	1997	1999	2001	2003	2005	2006
Public Administration (S1)	√	√	√	√	√	√	√	√	√
Business Administration (S1)	√	√	√	√	√	√	√	√	√
Development Administration (S1)	√	√	√	-	-	-	-	-	-
Government Administration (S1)	-	-	-	√	-	-	-	-	-
Governmental Science					√	√	√	√	√
Taxation (DIII)	√	√	√	√	√	√	√	√	√
Office Administration (DIII)	-	-	√	-	-	-	-	-	-
Entrepreneurship (Certificate)	√	-	-	-	-	-	-	-	-
Communication Science (S1)	-	√	√	-	√	√	√	√	√
Sociology (S1)	-	√	-	-	-	-	-	-	-
Library Science (DII)	-	-	√	√	√	√	√	√	√
Extension and Communication (DIII)	-	-	-	√	√	-	-	-	-
English Language Translation (DIII)	-	-	-	-	-	√	√	√	√
English Language (S1)	-	-	√	√	-	-	-	-	-
English Language (DIII)	-	-	√	√	-	-	-	-	-
English Language (Certificate)	√	-	√		-	-	-	-	-
Sociology of Economics and Social Problem (S1)	-	-	-	-	√	√	√	√	√
Graduate Program of Public Administration (S2)	-	-	-	-	-	-	√	√	√

Table 5. Credit distribution for every course cluster of S1 Program and DIII Diploma Non Education by 1990-2001

Study Subject Group	%	SKS	
		Degree Program (S1)	Diploma 3
MKDU	10-12	15-18	11-15
MKDK	25-33	38-50	29-38
MKK	53-63	79-95	63-75
UKT (for S1)	2	3	-

Table 6. Credit distribution for every course cluster of S1 Program and DIII Diploma Education by 1990-2001

Study Subject Group	Percentage		
	Diploma II	Degree Program (S1)	Akta I - IV
MKDU	13-15	-	-
MKDK	13-15	-	20
MKK	55-61	82-91	30
MKPBM	13-15	9-14	30
PPL	-	-	20

Table 7. Credit distribution for every course cluster of non education program in 1999

Study Subject Status	Credit distribution			
	In percentage		In SKS	
	Diploma 3	Degree Program (S1)	Diploma 3	Degree Program (S1)
Required	80-90	60-80	96-108	90-120
Optional	10-20	20-40	12-40	30-60

Table 8. Credit weight distribution for every course cluster of undergraduate and diploma program of FMIPA since 2002

Number	Courses	MPK	MKK	MKB	MPB	MBB	TAP	SKS Total
1	Mathematics							
2	Statistics	13	25	36	46	18	6	144
3	Biology	21	33	48	9	27	6	146
	a) Biology Program (S1)	10	66	51	11	-	6	144
	b) Agricultural Extension and Communication (S1)							
	1. Agricultural Specialist	11	26	56	35	12	4	144
	2. Husbandry Specialist	11	26	55	35	13	4	144
	3. Fishery Specialist	11	27	54	35	13	4	144
	c) Food Technology (S1)	11	52	9	30	36	6	144
	d) Agricultural Extension (DIII)							
	1. Agricultural Specialist	11	47	54	5	-	-	117
	2. Husbandry Specialist	11	43	58	5	-	-	117
	3. Fishery Specialist	11	41	60	5	-	-	117
	e) Environment Management (D1)	2	23	9	3	3	-	40
	Post-Harvest Management Certificate							
	1. Post Harvest Management of Husbandry Food							14
	2. Post Harvest Management of Agricultural Food							14

Table 9. Credit weight distribution for every course cluster of undergraduate and diploma program of The Faculty of Social and Political Science

Number	Courses	MPK	MKK	MKB	MPB	MBB	TAP	SKS Total
1	Administration Science Program							
	a) Public Administration (S1)	13	47	63	6	12	4	145
	b) Business Administration (S1)	13	42	62	17	6	4	144
	c) Governmental Science (S1)	13	43	51	18	15	4	144
	d) Taxation (D-III)	13	45	42	3	7	-	110
2.	Communication Science Program							
	a) Communication Science (S1)	13	43	48	24	12	4	146
	b) Library Science (DII)	8	15	32	14	12	-	81
3.	Sociology Program							
	Economics Sociology dan Social Problems (S1)	15	42	27	33	24	4	145
4.	Language and Literature Translation (D-II)	10	45	49	-	6	-	110

Table 10. Credit weight distribution for every course cluster of undergraduate program of The Faculty of Economics

Number	Courses	MPK	MKK	MKB	MPB	MBB	TAP	SKS Total
1.	Economics and Development Courses (a) Economics and Development Study (S1)	14	20	42	45	20	4	145
2.	Management Program (a) Management (S1) (b) Accountancy (S1)	14 6	50 45	42 76	35 9	- 5	4 4	145 145

Table 11. Credit weight distribution for every course cluster of undergraduate and diploma program of FKIP Courses in 2006

Number	Courses	Study Subject Group (SKS)						SKS Total
		MPK	MKK	MKB	MPB	MBB	TAP	
1.	Education Science Program Teaching Certificate Program	-	24	3-4	8	-	-	35-36
2.	Primary Education Program DII PGTK Program SD Teacher Education Program 1) DII PGSD Program (Classroom teacher) 2) S1 PGSD Classroom teacher Program (from DII PGSD Classroom teacher) 3) DII Sports Education Program	9 8 4 8	40 10 31 53	31 48 23 13	- 10 7 4	- 2 5 -	- - 4 -	80 78 74 78
3.	Indonesian Language Education Program 1) Indonesia Language Education a. Indonesian Language Education 1) S1 Indonesian Language Education Program - From DIII Indonesian Language Education - From DIII Indonesian Language and Literature b. English Language Education 1) S1 English Language Education Program - From DIII English Language Education - From DIII English Language dan Literature		24 24 31 31	6 10 3 9	9 19 6 15	2 2 - -	4 4 4 4	45 59 44 59
4.	Mathematics and Natural Science Program a. Mathematics Education S1 Mathematics Program - From SLTA - From D-I Mathematics Education - From D-II Mathematics Education - From D-III Mathematics Education - From D-III Mathematics b. Chemistry Education (S1) - From D-III Chemistry Education - From D-III Chemistry - From D-III Chemistry Education - From D-III IPA Non Education c. Biology Education (S1) - From D-III Biology Education - From D-III Biology - From D-III IPA - From D-III IPA Non Education d. Physic Education (S1)	8	101 90 65 32 29 28 26 39 36 28 20 34 34	27 12 4 4 16 7 18 7 18 10 21 10 21	6 6 6 2 2 2 6 6 2 6 2 6	- - - - - - - - - - - -	4 4 4 4 4 4 4 4 4 4 4 4 4	146 112 79 42 55 41 54 52 64 44 51 50 65

Number	Courses	Study Subject Group (SKS)						SKS Total
		MPK	MKK	MKB	MPB	MBB	TAP	
	- From D1II Physic Education		25	10	2	-	4	41
	- From DIII Physic		20	21	6	-	4	51
	- From IPA Education		35	10	2	-	4	51
	- From DIII IPA Non Education or same level		35	21	6	-	4	66
5	Social Education Science Program							
	a. Economics and Cooperative Education							
	- From D-II Economics Education or same level		31	9	-	-	4	44
	- From D-III Economics or same level		31	11	15	-	4	61
	b. Civics Education							
	- From D-III Pancasila and Civics Education		29	9	-	-	4	42
	- From D-III Law		29	11	15	-	4	59

Table 12. The development of Faculty of Social and Politics Science

Courses	1991	1993	1995	1997	1999	2001	2003	2005	2006
Public Administration (S1)	37w 42p Prog Utm 1MK Skripsi	36w 36p MK khusus 2 skripsi	37w 35p MK Khusus 2 skripsi	37w 35p MK Khusus 2 Skripsi	37w 34p	45w 17p	48w 5p	49w 5p	49w 5p
Business Administration (S1)	36w 45p Prog Utm 1MK Skripsi	38w 38p Prog Utm 2 MK Skripsi	38w 38p Prog Utm 2 MK Skripsi	38w 38p Prog Utm 2 MK Skripsi	38w 37p	41w 20p	49w 5p	49w 5p	49w 5p
Development Administration (S1)	36w 37p Prog Utm 1MK Skripsi	36w 32p Prog Utm 2 MK Skripsi	36w 38p Prog Utm 2 MK Skripsi	36w 38p Prog Utm 2 MK Skripsi	-	-	-	-	-
Governmental Administration (S1)	-	-	-	36w 38p Prog Utm 2 MK Skripsi	-	-	-	-	-
Governmental Science					22w 22p	43w 15p	48w 5p	48w 5p	48w 5p
Taxation (D-III)	38w 31p	39w 23p	39w 23p	39w 23p	40w 21p	40w 13p	41w 5p	41w 5p	41w 5p
Office Administration (D-III)	-	-	37w 32p	-	-	-	-	-	-
Private Entrepreneur (Certificate)	7	-	-	-	-	-	-	-	-
Communication Science (S1)	-	-	-	-	40w 21p	40w 20p	49w 5p	49w 5p	49w 5p
Sociology (S1)	-	-	-	-	-	-	-	-	-
Library (D-II)	-	21w 21p	21w 21p	21w 21p	21w 20p	36w 5p	28w 13p	32w 5p	32w 5p
Extension Communication (D-III)	-	-	36w 5p	36w 5p	26w 13p	-	-	-	-
English Translation (D-III)	-	-	-	-	-	30w 7p	36w 5p	36w 5p	36w 5p
English Language (S1)	-	-	18w 5p	18w 5p	-	-	-	-	-
English Language (D-III)	-	-	11w	11w	-	-	-	-	-

Courses	1991	1993	1995	1997	1999	2001	2003	2005	2006
			5p	5p					
English Language (Certificate)	8	-	8	-	-	-	-	-	-
Economics Sociology and Social Problems (S1)	-	-	-	-	21w 20p	-	-	-	-

Explanation:

p: elective courses

w: compulsory courses

Prog utm: main program

MK: courses

Tabel 13. Development of courses of Faculty of Education and Teacher Training

Courses	1991	1993	1995	1997	1999	2001	2003	2005	2006
Teaching Certificate	-	-	-	-	-		11w 9p	11w 9p	11w 9p
Teaching Certificate 1	5								
Teaching Certificate IV	6	6	4	5	6	6	-	-	-
D-II PGTK	-	-	-	-	-	-	-	24	24
D-II PGSD Classroom Teacher	27	27	27	26	26	26	25w 5p	25w 5p	25w 5p
S1 PGSD	-	-	-	-	-	-	27	27	27
D-II Sports Education			14w 12p	-					
D-II PGSD Physical and Health Teacher	14w 12p	14w 12p	36	36	20w 12p	26w 4p	25w 9p	-	-
D-II Sport Education for SD Teacher								24w 9p	24w 9p
D-II Non Formal Education	20w	12w 8p	12w 8p	12w 8p					
Indonesian Language Education (S1)	11w 8p	11w 8p	12w 9p	12w 9p	11w 8p	16w 4p	33	23	23
Indonesian Language Education (D-III)	-	-	-	-	-	26w 11p	31	-	-
Indonesian Language Education (D-II)	17w 13p	17w 13p	17w 14p	17w 14p	17w 12p	-	-	-	-
Indonesian Language and English Language Education for Open SMP Teacher (accredited certificate)	-	-	7	7	-	-	-	-	-
English Language Education (S1)	14w 11p	14w 11p	15w 11p	15w 11p	11w 15p	21	21	21	21
English Language Education (DIII)	-	-	46w 2p	45w 2p	-	29w 4p	31		
English Language Education (DII)	17w 12p	17w 11p	18w 11p	18w 11p	16w 11p	-	-		-
Indonesian Language and English Language Education for Open SMP Teacher (accredited certificate)	-	-	7	7	-	-	-	-	-

Courses	1991	1993	1995	1997	1999	2001	2003	2005	2006
Mathematics Education (S1)	12w 11p	12w 11p	12w 11p	12w 11p	12w 10p	11w 5p	52w 5p	52w 5p	52w 5p
Mathematics Education (DIII)	-	-	43	43	-	43w 5p	40w 5p		
Mathematics Education (DII)	16w 10	16w 10	16w 10	16w 10	14w 12p				
Mathematics and Physics Education for Small SMP/Open SMP Teacher (accredited certificate)	-	-	7	7	-	-	-	-	
Physics Education (S1)	12w 10p	12w 10p	12w 10p	12w 10p	12w 10p	17w 5p	24	24	24
Mathematics and Physics Education for Small SMP/Open SMP Teacher (accredited certificate)	-	-	7	7	-	-	-	-	-
Biology Education (S1)	24w 11p	13w 11p	13w 11p	13w 11p	13w 11p	16w 5p	24	24	24
Biology and Physics Education for Small SMP/Open SMP Teacher (accredited certificate)	-	-	7	7	-	-	-	-	-
IPA Education (DIII)	-	-	42w 5p	42w 5p	-	42w 5p	42w 5p	-	-
IPA Education (DII)	14w 12p	14w 12p	14w 12p	14w 12p	14w 12p	-	-	-	-
Chemistry Education (S1)	12w 10p	12w 10p	12w 10p	12w 10p	12w 10p	17w 7p	26	26	26
IPS Education (DII)	16w 15p	16w 15p	16w 15p	16w 15p	16w 12p	-	-	-	-
Economics and Geography for Small SMP/Open SMP Teacher (accredited certificate)	-	-	8	8	-	-	-	-	-
PMP Education (DII)	17w 16p	17w 16p				-	-	-	-
PPKN (DII)			17w 16p	17w 16p	17w 13p				
Civic Education (S1)	-	-	-	-	-	-	20	20	20
PPKN and Economics Education for Small SMP/Open SMP Teacher (accredited certificate)			8	8					
Economics and Cooperative Education (S1)	-	-	-	-	-		20	20	20

Explanation

p: elective courses

w: compulsory courses

Prog utm: main program

MK: courses

Tabel 14. The development of courses of Faculty of Mathematics and Natural Science

Courses	1991	1993	1995	1997	1999	2001	2003	2005	2006
Mathematics (S1)	40w 25p	40w 24p 1MK khusus skripsi	40w 24p 1MK khusus skripsi	40w 24p 1MK khusus skripsi	40w 26p	25w 28p	42w 5p	46w 5p	46w 5p
Applied Statistics (S1)	41w 19p	41w 19p 1MK Khusus Skripsi	40w 19p 1MK Khusus Skripsi	40w 19p 1MK Khusus Skripsi	-	-	-	-	-
Statistics (S1)					39w 20p	58w 5p	49w 5p	48w 5p	48w 5p
Biology (S1)	-	-	-	-	-	-	62w 5p	62w 5p	62w 5p
Agricultural Extension (DIII), with specialization in:									
a. Agricultural	-	33w 22p	33w 22p	33w 22p	34w 16p	58w 5p	32w 22p	48w 14p	48w 14p
b. Husbandry	-	30w 24p	30w 23p	30w 24p	47w 5p	53w 5p	30w 23p	41w 11p	41w 11p
c. Fishery	-	45w 5p	45w 5p	45w 5p	45w 5p	45w 5p	44w 5p	44w 5p	44w 5p
Environment Management (DI)	-	-	11 4MK khusus	12 4MK khusus	12 4MK khusus	16	15	15	15
Food Post-Harvest Management (certificate)									
a. Husbandry food post harvest management (certificate)	-	-	-	-	-	-	7	-	7
b. Agriculture food post harvest management (certificate)	-	-	-	-	-	-	-	7	7

Explanations:

p: required study subject

w: required study subject

Prog utm: main program

MK: study subject

Tabel 15. Development of courses of Faculty of Economic

Courses	1991	1993	1995	1997	1999	2001	2003	2005	2006
Economics and Development Study (S1)	41w 16p Prog Utm 1MK Skripsi	41w 18p Prog Utm 1MK skripsi	41w 18p Prog Utm 1MK skripsi	41w 18p Prog Utm MK Skripsi	41w 19p	43w 18p	50w 5p	50w 5p	50w 5p
Management (S1)	41w 17p Prog Utm 1MK Skripsi	41w 18p Prog Utm 1MK Skripsi	41w 18p Prog Utm 1MK Skripsi	41w 18p Prog Utm 1MK Skripsi	41w 18p	39w 22p	50w 5p	50w 5p	50w 5p
Industry and Service Supervisor (DII)	-	26w 5p	26w 5p	26w 5p	26w 5p	27w 5p	26w 5p		
Computer Applied and Budget Counting Specialize (DII)	-	24w 5p	-	-	-	-	-	-	-

Explanations:

p: required study subject

w: required study subject

Prog utm: main program

MK: study subject

Table 16. Total UT Students by Registration Period

Registration Period	New Students	Registered Students	Active Students	Total Registrar
1984.1	54.035	54.035	54.035	54.035
1984.2	0	31.294	54.035	54.035
1985.1	46.910	75.095	100.945	100.945
1985.2	0	76.584	100.945	100.945
1986.1	8.879	26.789	86.790	109.824
1986.2	10.963	38.198	94.750	120.787
1987.1	1.759	16.135	97.413	122.546
1987.2	2.033	21.647	41.094	124.579
1988.1	4.211	31.581	45.305	128.790
1988.2	3.584	30.222	46.427	132.374
1989.1	5.446	31.424	47.878	137.820
1989.2	5.740	27.922	45.002	143.560
1990.1	5.910	26.500	47.217	149.470
1990.2	35.364	54.399	77.473	184.834
1991.1	3.943	49.162	69.053	188.777
1991.2	63.213	106.106	125.601	251.990
1992.1	5.716	107.362	126.220	257.706
1992.2	74.753	179.233	199.932	332.459
1993.1	6.192	179.795	193.341	338.651
1993.2	124.896	281.961	309.465	463.547
1994.1	8.691	278.789	318.190	472.238
1994.2	97.995	350.386	385.175	570.233

1995.1	7.718	341.109	378.555	577.951
1995.2	58.872	356.581	398.315	636.823
1996.1	7.231	341.109	386.590	644.054
1996.2	62.933	332.124	397.543	706.987
1997.1	7.188	299.571	348.599	714.175
1997.2	107.361	274.773	417.204	821.536
1998.1	7.535	230.255	378.917	829.071
1998.2	50.308	270.569	402.897	879.379
1999.1	9.308	223.022	372.233	888.687
1999.2	37.564	230.260	324.661	926.251
2000.1	46.168	226.903	308.494	972.419
2000.2	18.945	162.662	289.248	991.364
2001.1	39.625	166.792	288.616	1.030.989
2001.2	16.337	165.261	285.926	1.047.326
2002.1	19.757	174.844	267.887	1.067.083
2002.2	8.812	131.914	225.203	1.075.895
2003.1	26.961	150.086	218.588	1.102.856
2003.2	24.826	124.787	208.675	1.127.682
2004.1	44.447	149.383	220.795	1.172.129
2004.2	31.144	148.665	221.664	1.203.273
2005.1	55.573	173.069	249.941	1.258.846
2005.2	61.739	208.100	287.037	1.320.585
2006.1	57.263	235.641	316.676	1.377.848
2006.2	64.396	254.854	343.651	1.442.244

Source: BAAPM, 2006.

Table 17. List of Universitas Terbuka Alumni for each Faculty

Faculty	Courses	Level	Year						Total
			Until 2002	2003	2004	2005	2006.1	2007.1	
FEKON	Industry and Service Supervisor	D2	97	16	13	24	7	0	157
	Economic and Development Study	S1	2.180	157	115	67	13	6	2.538
	Management	S1	6.002	917	945	720	321	223	9.128
FEKON Total			8.279	1.090	1.073	811	341	329	11.823
FISIP	Library Science	D2	632	66	59	65	20	15	857
	Taxation	D2	410	60	37	38	17	9	571
	Extension Communication	D2	1.934	0	0	0			1.934
	General English	D2	9	0	0				9
	English for Business	D2	1						1

Faculty	Courses	Level	Year						Total
			Until 2002	2003	2004	2005	2006.1	2007.1	
	English Language Translation	D2	0	9	21	29	15	13	87
	Public Administration	S1	11.167	829	902	697	305	186	14.086
	Business Administration	S1	2.170	93	164	121	20	46	2.614
	Government Administration	S1	582	0	0				582
	Language and Literature	S1	7	1	0				8
	Translation	S1	20	1	0				21
	Economic Sociology and Social Problems	S1	0	7	11	10	2	8	38
	Government Science	S1	1	13	28	55	26	42	165
	Communication Science	S1	50	99	116	97	73	100	535
FISIP Total			16.983	1.178	1.338	1.112	478	419	21.508
FKIP	Subject Study Teacher Certification Program	Sert.	341	0	0	0			341
	Study Subject Family Teacher Education	Sert.	1.802	0	0	0			1.802
	Continued Education	Sert.	237	2	0	0			239
	Accredited Certificate Program	Sert.	0	615	118	44	1	1	779
	Indonesian Language Education	D2	1.186	0	0	0			1.186
	English Language Education	D2	294	0	0	0			294
	IPA Education	D2	593	0	0	0			593
	IPS Education	D2	1.019	0	0	0			1.019
	Non Formal Education	D2	9	0	0	0			9
	Mathematics Education	D2	828	0	0	0			828
	Pancasila Moral Education	D2	343	0	0	0			343
	Sports and Health Education	D2	17	0	0	0			17
	DII PGSD Program	D2	395.742	38.385	15.606	11.371	11.497	732	473.333
	DII Sports Education Program	D2	29.427	5.412	1.936	1.392	552	149	38.868
	DIII PGSM Program	D3	31.107	0	0				31.107
	Indonesia Language Program	D3	2.661	114	75	40	9	17	2.916
	English Language Program	D3	1.367	95	83	62	35	23	1.665
	IPA Education	D3	662	53	63	37	9	11	835

Faculty	Courses	Level	Year						Total
			Until 2002	2003	2004	2005	2006.1	2007.1	
	Mathematics Education	D3	683	38	44	28	11	10	814
	Pancasila and Civic Education	D3	1.391	236	42	22	10	5	1.705
	Economic and Cooperative Education	D3	1.593	396	94	35	17	9	2.144
	Akta IV	Akta	13.051	798	10				13.859
	Teaching Certificate	Akta	0	224	1.742	2.373	1.570	886	6.795
	Indonesian Language Education	S1	2.457	601	381	199	118	101	3.857
	English Language Education	S1	3.707	399	238	185	80	78	4.687
	Biology Education	S1	2.460	378	112	130	51	52	3.183
	Physic Education	S1	1.467	156	117	72	48	39	1.899
	Chemistry Education	S1	2.277	103	71	59	26	28	2.564
	Mathematics Education	S1	2.551	225	241	180	62	71	3.330
	Civic Education	S1	0	0	432	276	42	45	795
	Economic and Cooperative Education	S1	0	0	179	168	86	61	494
	PGSM	S1	342	0	0	0			342
	PGSD	S1	0	0	2.060	5.790	5.203	423	13.476
	FKIP Total		499.614	48.230	23.644	22.463	19.427	2.741	616.119
FMIPA	Environment Management	D1	165	15	12	14	10	4	220
	Agricultural Extension	D3	3.577	2.377	779	225	54	28	7.040
	Mathematics	S1	135	17	12	14	6	8	192
	Biology	S1	0	0	0		1	1	2
	Agricultural Extension and Communication	S1	0	0	0	264	250	451	965
	Applied Statistics	S1	768	33	15	21	3	8	848
	FMIPA Total		4.645	2.442	818	538	324	500	9.267
Postgraduate	Magister of Public Administration	S2	0	0	0	6	8	0	14
	Magister of Management	S2	0	0	0		10	8	18
	Postgraduate Total		0	0	0	6	18	8	32
	TOTAL		529.521	52.940	26.873	24.930	20.588	3.897	658.749

Source: BAAPM, 2006.

